Smithsonian

October 1982

Yak caravan makes way back to Tibet after trading in Nepal (p.50)

1983 FORD ESCORT WAGON

ESCORT

THE BEST SELLING WAGON IN AMERICA.

A good thing gets even better.

For two years running, Escort Wagon has outsold every wagon in America. Foreign or domestic.* It also has 58.4 cubic feet of cargo volume with the rear seat down. But since there's always room for improvement, we've added over 90 new improvements, ranging from a new luxury sound insulation package to a new fuel-conscious shift indicator light.

A wagon for braggin'.

Escort is the only American-made wagon with both front-wheel drive and four-wheel independent suspension.**

And Escort's unique CVH engine also gives you efficiency worth bragging about.

43 EST HWY **29** EPA EST MPG

Based on Ford tests. Actual EPA ratings not available at press time. Estimates projected for comparison. Your mileage may differ depending on speed, distance and weather. Actual highway mileage and California ratings lower. See your Ford Dealer for actual EPA ratings.

Whether you buy or lease, see the '83 Escort Wagon at your Ford Dealer. And remember, get it together—buckle up.

*Based on R.L. Polk & Co. registrations for October, 1980, thru May, 1982. **Excluding other Ford Motor Company products.

HAVE YOU DRIVEN A FORD...LATELY?

Ford

FORD DIVISION

WHAT HAPPENS WHEN HALF A WORKING COUPLE HAS TO CARRY THE WHOLE LOAD?

Allstate's Joint Mortgage Protection can help provide the support to keep on going.

Now both halves of a working couple can be insured with one policy—usually for less than the cost of two. Joint Mortgage Protection and Joint Whole Life—ideal coverage for couples—help either half carry on if the other dies.

We can also help the two of you improve your retirement picture with insurance plans that grow automatically at competitive interest rates.

Right now, we're offering a lot of life insurance at our lowest prices ever.

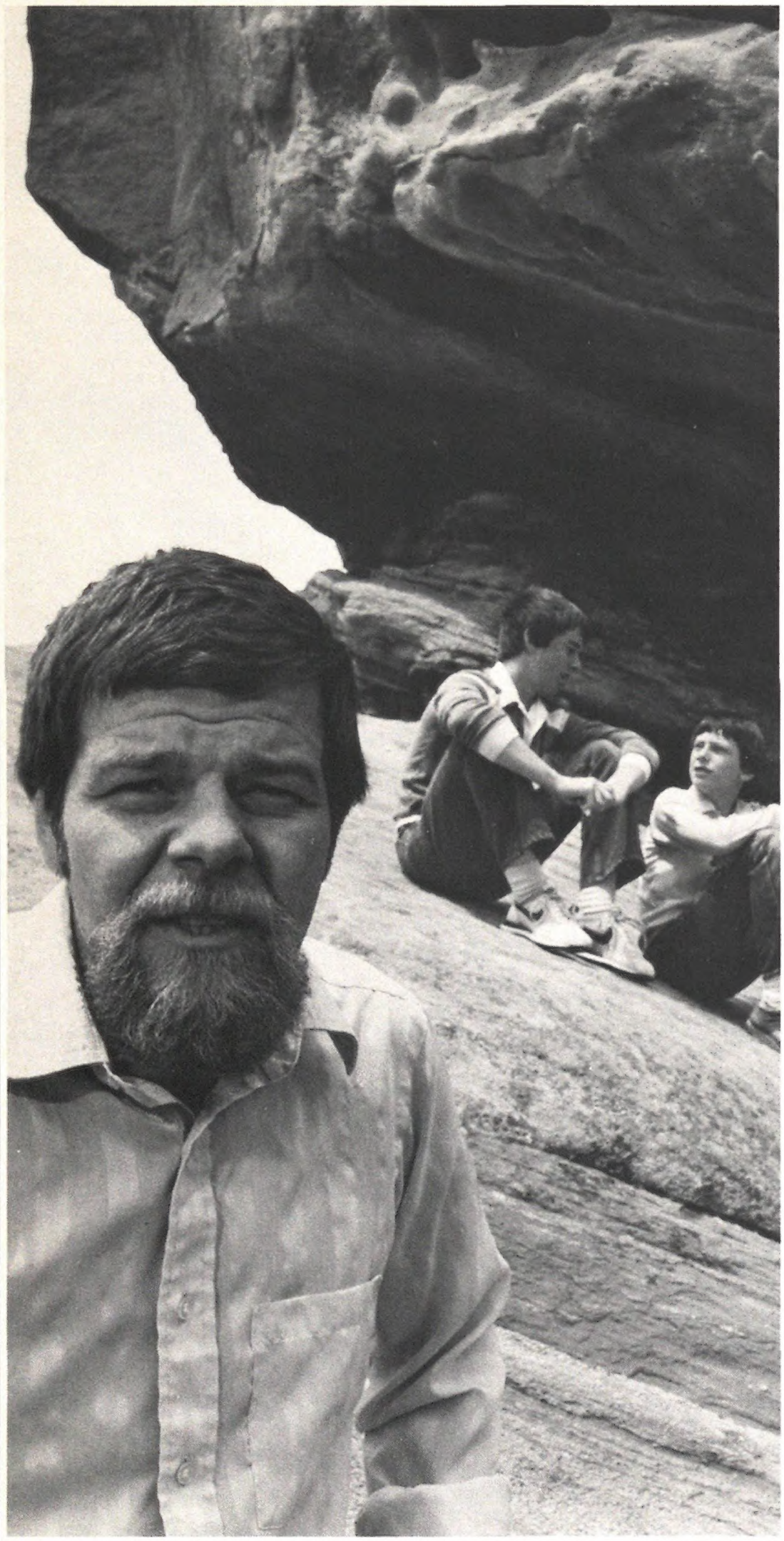
So this is a good time to team up with your Allstate agent for life insurance to fit you and your other half. Just in case one of you ever gets saddled with the whole load.

Allstate® Allstate Life Insurance Company
Northbrook, Illinois

You're in good hands.

Joint Mortgage Protection is our Joint Decreasing Term policy. Products available in most states.

"As a chemist who helps decide how industry wastes are managed, my standards are high. As a father, even higher."



Peter Briggs, Senior Advisor, Government and Industry Analysis, at a major chemical and mining company, with sons Chris and Jonathan.

"I spend most of my time on the job developing progressive company policies to protect the environment. Throughout the chemical industry, there are more than 10,000 specialists like me whose major concern is controlling pollution.

"When I was hired, I was told I was to be the conscience of my company," says Peter Briggs. "I'm concerned about the environment. I want it to be clean for my kids, as well as everybody else's.

"To dispose of chemical wastes, for instance, we use recycling, incineration and other methods, such as building secure landfills with thick, compacted clay linings. Then we check regularly to make sure liquids do not escape.

"In fact, my company has a whole internal Environmental Review Group that works constantly to monitor current operations and improve our standards. They descend on our operations for week-long investigations. Eighteen hours a day, weekends included.

"I know the whole chemical industry is concerned about the environment. We've already spent $15.3 billion controlling pollution. And our estimates show we'll spend $10 billion more over the next five years on waste disposal alone. So I know I'm not the only one with a conscience."

For a booklet that tells how we're protecting people and the environment, write: Chemical Manufacturers Association, Dept. LM-210, P.O. Box 363, Beltsville, Maryland 20705.

© CMA 1982

America's Chemical Industry

The member companies of
the Chemical Manufacturers Association

NEVER BEFORE — has pure gold been added to perhaps the most beautiful of all United States silver coins — The Walking Liberty half dollar.

Our bi-tone process, by which 24 Karat gold is applied to the silver coins with extreme precision creates a magnificent two tone of precious metals. This miraculous process was invented by Jimmy Chin and these unique silver and gold coins are available only by mail order from Cartwheels, Inc. of Wilmington, Delaware.

The coins are authentic and not newly minted medals. Lenscote II, our exclusive coin cover, permanently seals the two tone beauty. The necklace comes complete with a 14 Karat Gold filled chain (24" for her or 27" for him). The complete necklace is $129.

You will receive a numbered Certificate of Authenticity with each piece and all are gift wrapped in velvet boxes. We guarantee a full refund if not delighted. Please understand price is subject to change.

If possible, we would like to send a date meaningful to you, between the years 1936 and 1947.

CARTWHEELS, INC.
2500 Grubb Road
Wilmington, DE 19810

ORDER TOLL FREE
800-441-7666

Please send me _____ necklace(s) _____ 24" chain _____ 27" chain

Dated 1939 - 40 - 41 - 42 - 43 - 44 - 45 - 46 - 1947 - our *choice* ☐

Check, M.O. enclosed $_____. Charge my credit card $_____

Card #_____

Exp. Date_____ Telephone # _____

Name_____

Address_____

City_____ State_____ Zip_____

October 1982

Smithsonian

Volume 13, Number 7

Table of Contents

Cover: Slowed by an early snowstorm, yak train plods home to Tibet laden with Nepalese grain (p. 50)
Photograph by Eric Valli

12 *The view from the castle* by Secretary Ripley
16 *Letters to the Editor*
28 *Around the Mall and beyond* by Edwards Park
42 *Phenomena, comment and notes* by John P. Wiley jr.
47 *Picture credits*

50 **Over the high Himalayan passes, by yak**
Salt for grain, grain for salt—it's an ancient exchange that still goes on, despite recent history
By Christine de Cherisey, photographs by Eric Valli

64 **Great armor from a great collection**
After 900 years, the Tower of London is yielding up some shining examples for North American tour
By John Fleischman

76 **The chirpy chipmunk: far from endangered**
Gifted with acute hearing, this winning rodent survives and prospers by minding its own business
Article and photographs by Lawrence Wishner

88 **A way of life changes on Daufuskie Island**
This small black enclave, unaltered for centuries, faces the threat—and promise—of development
By Alex Haley
Photographs by Jeanne Moutoussamy-Ashe

100 **Harvard's everblooming flowers of glass**
Created by a father and son in Dresden, the unique collection is a teaching tool for botany classes
By Richard Evans Schultes and William A. Davis
Photographs by Hillel Burger

110 **Recognition comes to a quiet American artist**
Milton Avery followed no rules ("I follow myself") and is finally seen for what he was, a master
By Robert Wernick

120 **When the 'kranks' roared 'Slide, Kelly, slide!'**
In baseball's early days, he was the most creative —meaning the most outrageous—player of them all
By James A. Cox, illustrations by Brenda Losey

132 **Chaparral, tinderbox of the California coast**
Those destructive wildfires may be brought under control by a program of prescribed burning
By Donald Perry and Sylvia Merschel
Photographs by Donald Perry

144 **Thirty-nine paintings for the price of one**
Sale of Samuel F. B. Morse's pictorial "catalog," *Gallery of the Louvre*, sets an American art record
By Earl A. Powell

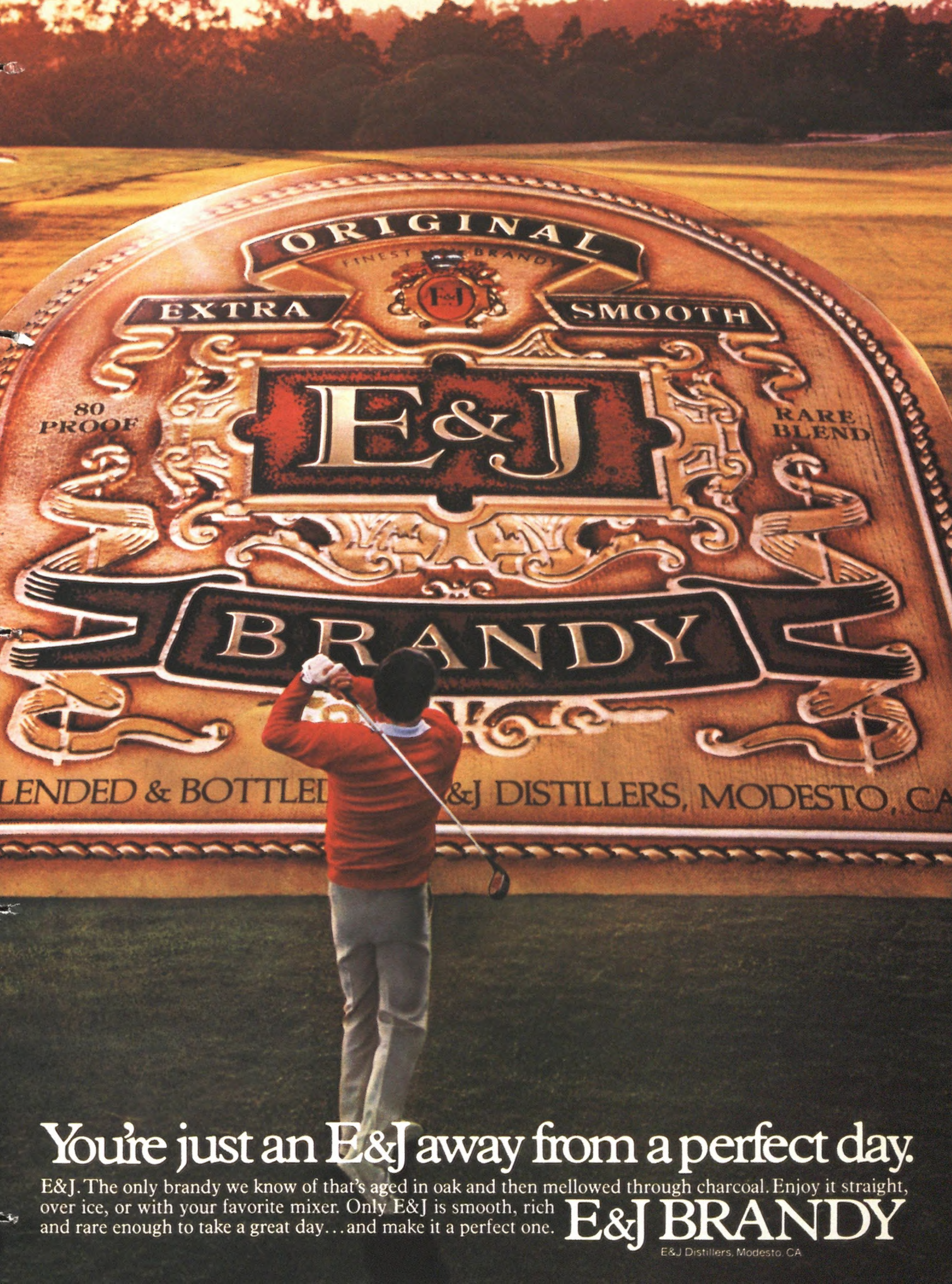
148 **When Sputnik was launched, so was the space age**
It was 25 years ago that the Soviets sent their beeping ball into orbit; we still feel the impact
By Paul A. Hanle

169 **Why birds take winter vacations**
There isn't enough food in the North, so they head for the tropics, where their behavior changes
By Roger F. Pasquier and Eugene S. Morton

190 *Book reviews*
200 *Additional reading*
202 *October events at the Smithsonian*
206 *Smithsonian tours*

208 **All Eksikutifs aboard for Krf, Trst, Walla Walla!**
By Israel Shenker

Smithsonian (ISSN 0037-7333) is published monthly
by the Smithsonian Associates, 900 Jefferson Drive, Washington, D.C. 20560.
© Smithsonian Institution 1982. All rights reserved.
Reproduction in whole or in part without permission is prohibited.
Subscription price $17 a year in U.S. possessions, $25 elsewhere.
Single copy price $2. Second-class postage paid at Washington, D.C.
Editorial offices, 900 Jefferson Drive, Washington, D.C. 20560.
Advertising and circulation offices at 420 Lexington Ave., New York, NY 10170.
Members: Please address all subscription correspondence
and change of address information to P.O. Box 2955, Boulder, CO 80322.
Postmaster: send 3579s to P.O. Box 2955, Boulder, CO 80302.



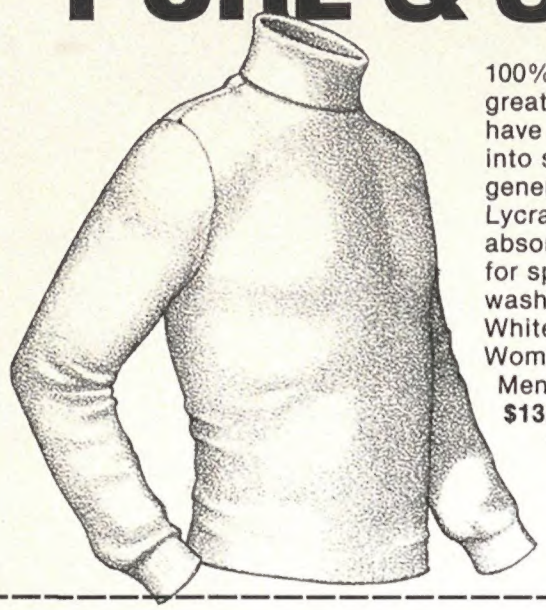
You're just an E&J away from a perfect day.

E&J. The only brandy we know of that's aged in oak and then mellowed through charcoal. Enjoy it straight, over ice, or with your favorite mixer. Only E&J is smooth, rich and rare enough to take a great day...and make it a perfect one.

E&J BRANDY

E&J Distillers, Modesto, CA

PURE & SIMPLE



100% cotton turtlenecks fit as great as they feel. Shoulder seams have 2-way stretch to spring back into shape. Ribbed cuffs and generous fold-over collar are Lycra® -reinforced. Soft and absorbent, these knits are perfect for sports or leisure wear. Machine washable. **Colors:** Camel, Navy, White. Men's also in Black, Women's also in Red. **Sizes:** Men's S/M/L/XL. Women's S/M/L. **$13.95** postpaid.

Order Today!
Money Back Guarantee!

Here is my check or money order for $_____
(Add sales tax for shipment into CA, CO, D.C., IL, MI, PA, WA).

Please charge my ☐ MasterCard ☐ VISA

☐ American Express Good Thru_____

Card No. _____

#7149 Men's 100% Cotton Turtleneck

Color _____ Size_____

#7236 Women's 100% Cotton Turtleneck

Color _____ Size_____

☐ **Send me your FREE color catalog of quality outdoor apparel and equipment.**

Name_____

Address_____

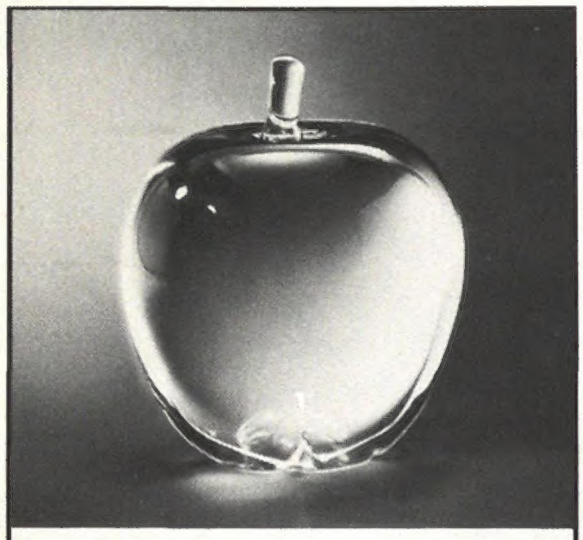
City_____

State_____ Zip_____

STORES IN: Seattle ▪ San Francisco ▪ Philadelphia ▪ Boston ▪ Detroit ▪ Minneapolis ▪ Chicago ▪ Washington, D.C.

Eddie Bauer®

Dept. EMN, Fifth & Union, Seattle, WA 98124



Send $5 for the new Steuben Catalogue

The classic Steuben apple. One of 112 designs in pure crystal—bowls, vases, ornamental objects, animals, jewelry, and major works. From $100.

☐ I enclose $5.00. Please send me the new 1982-83 Catalogue, to be mailed beginning early October.

Name_____

Address_____

City_____

State_____ Zip_____

STEUBEN GLASS

Fifth Avenue at 56th Street, New York, N.Y. 10022

SM2

CarnegieInternational

October 23, 1982—January 2, 1983

The oldest continuing exhibition of international contemporary art in the Americas.

Museum of Art, Carnegie Institute
4400 Forbes Avenue
Pittsburgh, Pennsylvania U.S.A.

This exhibition is made possible by a grant from Alcoa Foundation and income from The A. W. Mellon Educational and Charitable Trust Endowment Fund for the Pittsburgh International Exhibition.

Smithsonian

SECRETARY OF THE SMITHSONIAN INSTITUTION:
S. Dillon Ripley

EDITOR:
Don Moser

EXECUTIVE EDITOR:
Ralph Backlund

BOARD OF EDITORS:
Edwards Park
Bennett Schiff
Nancy Seaman
Paul Trachtman
John P. Wiley jr.
Richard L. Williams
Caroline Despard, Pictures

ASSOCIATE EDITORS:
Constance A. Bond
Marlane A. Liddell
Dana Little
Jane D. Scholl
Carol Simons

ASSISTANT EDITORS:
Diane M. Bolz
Frances R. Glennon
Judy Harkison
Vivian Noble
Kathryn Kelley, Pictures
Edgar Rich, Pictures

EDITORIAL ASSISTANT:
Charlene Mason

PUBLISHER:
Joseph J. Bonsignore

CIRCULATION:
Anne Keating, Associate Publisher
Adeline Sherr
John O'Donnell

ADVERTISING:
Thomas H. Black, Associate Publisher
Edward Daly
Lewis P. Ogle

PRODUCTION:
E. Cherry Doyle
Kathy Yu Coplan
Mary D. Haskin

GENERAL MANAGER:
Carey O. Randall
Mary Ellen Bobb

CONSULTANT TO THE SECRETARY:
Edward K. Thompson

Heritage

Craftsmanship in the finest tradition.

From the Heritage Upholstery and Dynasty occasional collections.
An *Authorized Drexel Heritage Dealer* is your assurance of consistently fine quality and service. Shop only where the registered emblem is displayed.
For the name of the authorized dealer nearest you, call toll free 800-447-4700 (in Illinois, 800-322-4400). In Alaska and Hawaii, call 800-447-0890.

© 1982 Drexel Heritage Furnishings Inc.

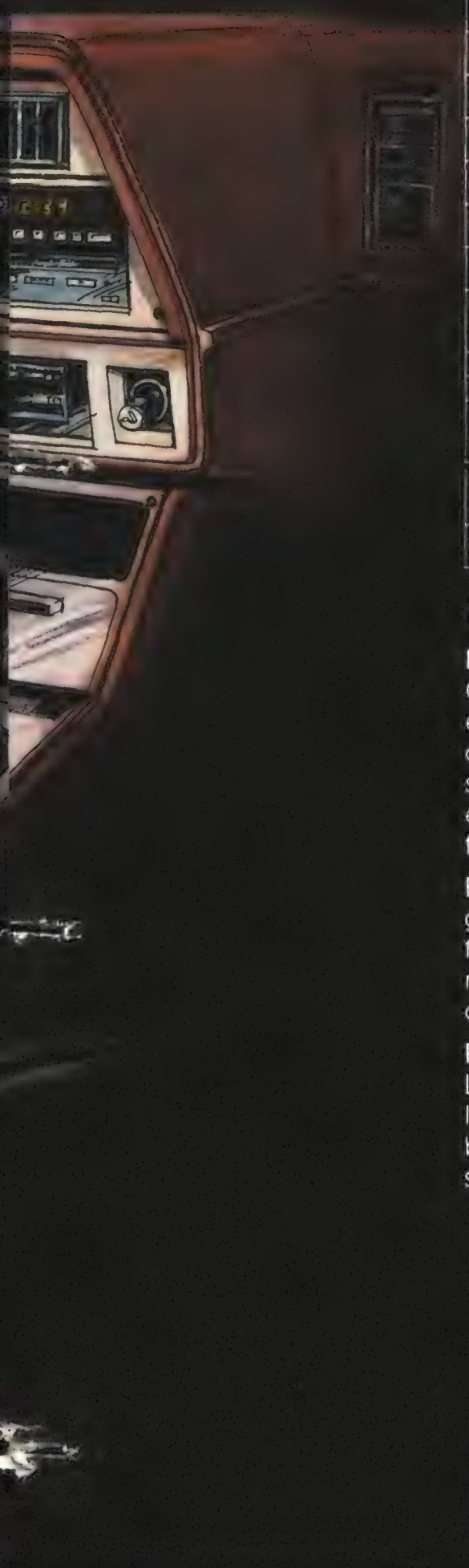
CIMAR
CUTS THROUGH THE

GM

BEST OF ALL...IT'S A CADILLAC.

RON '83

IMPORT MYSTIQUE.



HOW CIMARRON '83 BEATS THE IMPORTS AT THEIR OWN GAME

	CIMARRON '83	AUDI 5000S	BMW 320i	VOLVO GL	SAAB 900S SEDAN
FRONT-WHEEL DRIVE	STANDARD	STANDARD	NOT AVAILABLE	NOT AVAILABLE	STANDARD
ELECTRONICALLY FUEL-INJECTED ENGINE*	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
FIVE-SPEED MANUAL INCLUDING OVERDRIVE	STANDARD	STANDARD	STANDARD	STANDARD 4 SPEED	STANDARD
TACHOMETER WITH FULL INSTRUMENTATION	STANDARD	EXTRA COST	STANDARD	STANDARD	STANDARD
POWER-ASSISTED RACK AND PINION STEERING	STANDARD	STANDARD	RACK AND PINION ONLY	STANDARD	STANDARD
EPA PASSENGER COMPARTMENT VOLUME	89 CU FT	90 CU FT	82 CU FT	89 CU FT	89 CU FT
TUNGSTEN HALOGEN FOG LAMPS	STANDARD	NOT AVAILABLE	EXTRA COST	NOT AVAILABLE	DEALER INSTALLED OPTION
ALUMINUM ALLOY WHEELS	STANDARD	STANDARD	EXTRA COST	STANDARD	STANDARD
AIR CONDITIONING	STANDARD	STANDARD	EXTRA COST	STANDARD	STANDARD
ELECTRONICALLY TUNED AM/FM STEREO RADIO	STANDARD (may be deleted for credit)	EXTRA COST	EXTRA COST	DEALER INSTALLED OPTION	DEALER INSTALLED OPTION
LEATHER-WRAPPED STEERING WHEEL	STANDARD	STANDARD	EXTRA COST	DEALER INSTALLED OPTION	NOT AVAILABLE
LEATHER SEATING AREAS	STANDARD	EXTRA COST	NOT AVAILABLE	STANDARD	NOT AVAILABLE

*Some Cadillacs are equipped with engines produced by other GM divisions, subsidiaries or affiliated companies worldwide. See your dealer for details. All imports shown are 1982 models. Level of standard equipment varies.

Bold new performance. In '83 Cimarron sports a snappy new 2.0 liter electronically fuel-injected engine with a 5-speed manual transmission. (3-speed automatic is available.) Plus an exclusively tuned Touring Suspension, front-wheel drive and more.

Bold new look. There's a strong new grille treatment and tungsten halogen fog lamps. A proud new hood medallion. And crisp, new aluminum alloy wheels.

Plus Cadillac touches... Like body-contoured, leather-faced front bucket seats with lumbar support.

Air conditioning. Full instrumentation including tach. All standard. And available features like a new electronically tuned AM/FM stereo cassette radio with 5-band graphic equalizer.

Extraordinary value. Compare Cimarron '83 to any import in its class. Feature for feature. Sticker for sticker. Most of all, compare performance with a demonstration drive. See a Cadillac dealer soon.

Make your name noteworthy.

You can own the most distinctive personal stationery available -- beautiful single-fold notes with your name embossed by an exclusive process. In ivory or soft blue with matching envelopes. 4 by 5 inches, folded.

To order, call toll-free 800-323-6067. In Illinois call collect 312-351-0312. Or mail the coupon below.

THE Letter Paper CONSULTANTS Box 409, Grayslake, IL 60030

__Send me 50 notes and 50 plain envelopes for $18.00 postpaid.
__Send me 100 notes and 100 embossed envelopes for $29.00 postpaid.
My choice of color: __ivory __soft blue
Emboss my name on notes: _____
My address: _____
_____
__MasterCard __American Express
__Check or money order __VISA
signature expiration date
Card No. _____ Phone No. _____
__Send me free samples of fine personalized stationery.

SOME COFFEES YOU SAMPLE. OURS, YOU LOVE. That sample costs only $10.50, a remarkable price for a selection of three one-pound packages of one of the world's finest gourmet blends and roasts, Cap Saurage's Community Coffee—a taste that has led three generations of customers to savor and enjoy particularly flavorful lives. We will send you this selection along with our gourmet coffee book, so you may experience the finest blends of Brazilian Santos, Colombian Medellin-Armenia and Mexican Altura coffees: an introduction to the pleasures of different roasts from a subtle light medium to the peak flavor in our dark roasted coffees.

Call Toll Free 800-535-9901 (with your Visa or Master Card number ready) or send $10.50 with your name and address to Community Coffee Company, P. O. Box 3778, Dept. S2, Baton Rouge, Louisiana 70821-3778. Specify choice of whole bean, regular or filter grind.

Community Coffee BRAND ®

Smithsonian

Board of Regents Smithsonian Institution

Ex Officio

Chief Justice of the United States
Warren E. Burger, Chancellor
Vice President of the United States
George Bush

Appointed by the President of the Senate

Honorable Jake Garn
Honorable Barry M. Goldwater
Honorable Henry M. Jackson

Appointed by the Speaker of the House

Honorable Edward P. Boland
Honorable Silvio O. Conte
Honorable Norman Y. Mineta

Appointed by Joint Resolution of Congress

Mr. David C. Acheson
Honorable Anne Armstrong
Mr. John Paul Austin
Dr. William G. Bowen
Dr. William A. M. Burden
Dr. Murray Gell-Mann
Honorable A. Leon Higginbotham jr.
Mr. Carlisle H. Humelsine

National Board of the Smithsonian Associates

Mr. James M. Kemper jr., Chairman
Mrs. Joe L. Allbritton
Mr. Arthur G. Altschul
Mr. Perry R. Bass
Honorable Lucius D. Battle
Mr. William W. Bodine jr.
Honorable Nicholas F. Brady
Mrs. Jackson Burke
Mr. David L. Coffin
Mrs. Justin Dart
Mr. Gaylord Donnelley
Mr. James A. Elkins jr.
Mr. W. L. Hadley Griffin
Mr. Gordon Hanes
Mr. John F. Harrigan
Mrs. Parker T. Hart
Mr. Richard D. Hill
Mrs. Henry L. Hillman
Honorable Carla Anderson Hills
Mr. Samuel C. Johnson
Mr. Seymour H. Knox III
Mr. Brooks McCormick
Mr. Arjay Miller
Justice Sandra D. O'Connor
Mr. H. Smith Richardson jr.
Mrs. George M. Seignious II
Mr. David E. Skinner
Mr. Roger B. Smith
Mrs. Edson W. Spencer
Mr. Malcolm T. Stamper
Mrs. E. Hadley Stuart jr.
Mr. Vernon Taylor jr.
Mr. Parke Wright

Honorary Members

Mr. William S. Anderson
Mr. Richard P. Cooley
Mr. Joseph F. Cullman III
Honorable Leonard K. Firestone
Mr. Alfred C. Glassell jr.
Mr. William A. Hewitt
Mrs. Lyndon B. Johnson
Mr. Lewis A. Lapham
Honorable George C. McGhee
Mr. Francis C. Rooney jr.
Mr. Merritt Kirk Ruddock
Honorable Thomas J. Watson jr.

Lenox.

Aworld apart. Let it express your world.

Lenox China and Crystal

Send for our free color brochure. Lenox, Lawrenceville, N.J. 08648.

© Lenox 81

Secretary Ripley's comments

The view from the castle

Instant communication, as in television, hasn't led to the Promised Land as far as education and learning are concerned

On late-summer mornings in western Connecticut there is often a thick fog, gray and clinging, giving no promise of the day ahead. Objects may appear as the mist clears and burns off, or the weather may "settle in," as we say, perhaps to turn into a soaker. Late summer is always a season of thunderheads. The times suit the season, somehow. In the world's temperate zones, wars tend to start in the brooding heat or mists of late summer—witness 1914 and 1939 of recent memory. The season is filled with flickering uneasiness, like heat lightning.

Fifteen years ago I remember being depressed after a talk with the late Marshall McLuhan, then the guru of the new utopia presaged by television. In his ideal concept, education and learning would be available for all in this dawning new day of instant communication. I was concerned then by what he meant. How could education be achieved without concentration, without disciplined attention? Education is not necessarily drudgery. It can be quite the opposite, but it does require a perceptible attention span. Here at the Smithsonian we believe in open learning in museum exhibitions, but the option of switching to another channel is not at hand, and the volume is controlled.

After so many years, for all I know, there may be television sets in every living room, kitchen or bedroom, but utopia seems as far away as ever. That set—a Cyclopean eye staring out, gray and vacuous, or colored and dancing as if seeing stars after a blow to the head—seems to me to have failed its purpose. For the truth is that the producers of television programs often pile sensation upon sensation in order to ensure that the viewer will remain tuned to their channel. What is then purveyed is so noisy, so kaleidoscopic, so edited into simple flashes and jolts, that our perceptions become dulled, layered over with a self-generated shield of inattention.

In the whole world today it seems that our technological successes in communication have been self-defeating in learning or education. The more saturated we are with impressions, the more our senses become exhausted, thus contradicting McLuhan's idealistic prescription. And as we are turned off, so we withdraw from spiritual grace. We don't care about mankind any more.

Every day people are exploded into bits by bombs, air crashes, assassinations and similar violent acts. Watching instant pictures of all this is like being on the battle line itself. So we become hardened, humanity is diminished, and it is everyone for himself. Indifferent or numb, we are as steeled as those who live in bedlam. As a very wise woman recently remarked, "We have become immune to violence and war because we see it on television." Thus it seems that the medium has betrayed the message.

Selfishly, I can at least take refuge in the lessons of history as we learn them at the Smithsonian. As I once wrote, "Look backward lest you fail to mark the path ahead." In the woods where uncertainty about paths is always a factor, keeping an eye on the blaze marks fore and aft will assure us of our future. Surely the lessons of history should help to clear the mists of the present brought on by satiety.

S. Dillon Ripley

CRISTAL LALIQUE®

ZEILA

HALL'S
Kansas City

SAKOWITZ
Houston

BULLOCKS WILSHIRE
Southern California

For descriptive brochure and name of nearest dealer, send 1 $ to Lalique, Dep't S.Z., 225 Fifth Avenue, New York, N.Y. 10010

Grace your home with the most

© 1982 Calhoun's Collectors Society, Inc.

colorful collection of all...

Two Thousand Years of Sailing Ships

An heirloom collector's edition of twelve fine porcelain plates featuring the outstanding original art of one of the world's foremost maritime artists

Examine the first magnificent sailing ship for 15 days without risk

To be issued in a limited edition. To guarantee acceptance, your reservation must be postmarked by October 31, 1982.

HISTORY'S greatest sailing ships flash across the wind and waves with a tale that stirs us all. Their courageous captains heard the call of new worlds. Crossed oceans few dared to dream of. And changed the course of history by the set of their sails.

Now – for the very first time – you can bring all the beauty and romance of history's greatest sailing ships into your home with the exquisite new porcelain plate collection by one of the world's great maritime artists . . . Alan D'Estrehan's *Two Thousand Years of Sailing Ships.*

Consider the importance of this collecting event

- The *first* time the greatest sailing ships have been honored on a limited edition plate collection.
- Created by a premier maritime artist whose original works of art are enjoyed the world over.
- Crafted on Royal Cornwall®, a fine china prized for its translucence and enduring strength.
- Museum-quality art that will forever be in demand, and that you'll be proud to show in your home.

The Unsurpassed Original Art Of Alan D'Estrehan

The twelve magnificent paintings for this series are the creations of the award-winning artist Alan D'Estrehan. Widely exhibited and critically praised throughout Europe and America for his maritime art . . . *only* D'Estrehan could have created original works of art so stunning, so painstakingly authentic in every minute detail . . . that they capture the movement, the character, the very essence of these twelve historic ships.

From Cleopatra's Royal Barge that sailed the Nile . . . to the proud *USS Constitution,* nicknamed "Old Ironsides" for all the cannon balls she withstood during the War of 1812 . . . D'Estrehan has created the most dramatic portraits of history's greatest sailing ships *exclusively* for this fine porcelain series.

Hand-Crafted on Royal Cornwall Porcelain

What makes this collection even more beautiful . . . more striking and radiant is that D'Estrehan's art is brilliantly executed on Royal Cornwall porcelain – one of the world's finest porcelains. Whether it's the charging deep green hull of the famous tea clipper *Cutty Sark* or the billowing striped mainsail of a Viking warship running before a storm . . . every shade and hue of D'Estrehan's art glows from the gleaming surface of the fine Royal Cornwall porcelain.

Together, these twelve fine art plates form a collection of beauty and romance that will brighten your home . . . and let your entire family relive the exciting stories behind the ships that sailed into history.

Affordable, Limited Edition Works of Art

Alan D'Estrehan's *Two Thousand Years of Sailing Ships* will be issued in a single limited edition which will be permanently closed at the end of 1984. To forever certify the collection's Limited Edition status, each plate will be accompanied by a signed Certificate of Authenticity and historic literature on each magnificent ship.

Yet, despite its strict edition limit . . . and the care and handcraftsmanship lavished on each plate, *Two Thousand Years of Sailing Ships* is modestly priced. The cost for each fine plate – measuring a full 9¼ inches in diameter and banded by hand in shimmering 24 karat gold – is *only* $49.50. *But you need send no money now.*

15-Day, No-Risk Examination

To fully appreciate the breathtaking array of colors found on any one of these Collector Plates . . . *you must see them for yourself.* Examine the first plate, at no risk, for 15 days. Show it off in your home. Enjoy its exact use of color and detail. Imagine the complete collection handsomely displayed in your home. If you're not delighted with it in every way, simply return it for a full refund or charge-card credit, and you'll be under no further obligation. Your satisfaction is 100 percent guaranteed.

Advance Reservation Deadline: October 31, 1982

Your *Two Thousand Years of Sailing Ships* will make an heirloom collection you'll be proud to show in your home and even more proud to pass on to future generations. Truly, this timeless art that sings the story of the sea . . . will be cherished forever.

To be certain of acquiring these beautiful plates, you must fill out and mail the attached Advance Reservation by October 31, 1982, to guarantee acceptance. So, do be sure to reserve your collection, *today.*

Calhoun's Collectors Society
7275 Bush Lake Road, P.O. Box 1218 Minneapolis, MN 55440

Advance Reservation

Mail to
Calhoun's Collectors Society
7275 Bush Lake Road, P.O. Box 1218
Minneapolis, MN 55440

To be guaranteed acceptance, postmark no later than October 31, 1982. Send no money now.

Please enter my subscription for *Two Thousand Years of Sailing Ships* – a collection of twelve, fine porcelain plates.

I need send no money now. The plates are to be sent to me at the rate of one each month. I will be billed $49.50* for each plate in advance of shipment. (Plus $2.50 postage and handling.) I may request to have each installment charged to my credit card.

Signature _____
(required)

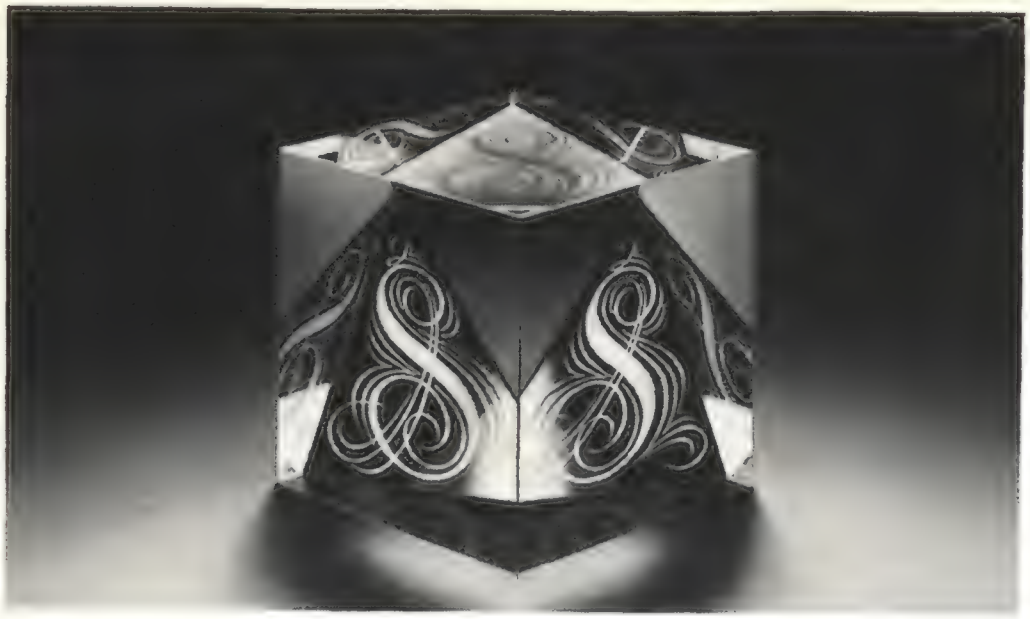
Name ☐ Mr. ☐ Miss ☐ Mrs. ☐ Ms. _____
(Please print clearly)

Address _____

City _____

State _____ Zip _____

*Minnesota residents add 5% ($2.48) sales tax for each installment. #2125-CCC



Paperweights, A to Z

A new series in crystal, each piece inscribed with a single, flourished calligraphic initial that multiplies within prismatic facets. Please specify initial desired. Alphabet Paperweights 8440a: Height 2½". $275 each. Signed Steuben.

Available by mail or telephone
Steuben Glass, Fifth Avenue at 56th Street, New York, N.Y. 10022.
By phone: 1-212-752-1441. Out of State: 1-800-223-1234.
Major credit cards accepted.

STEUBEN GLASS

Own a Classic

Imagination and talent combine to create this remarkable lifelike wildfowl carving. Fashioned from a solid block of white pine, this classic Drake explodes in a profusion of color. Each hand-painted Mallard is branded, signed and dated by the artist. Finished Mallard Drake (shown) #168, Hen #179 (15" long) – $90.00 ea., the pair – $175.00.

Completely carved, ready-to-paint kits with detailed instructions: Mallard Hen or Drake (12" long) #1067 – $24.95 ea. or the pair – $45.00. Write for your 32 page color catalog – $1.00 or free with order. Check, MasterCard, BankAmericard/ Visa, welcome.

Bay Country Woodcrafts
Dept. 677, Oak Hall, VA 23416

Letters to the Editor

Minneapolis Children's Theatre

Dear Sir: Your August article and photographs were delightful. I am an older adult who finds the Children's Theatre Company's plays full of excitement, life and an ambience that is almost like ballet.

A few additional facts might be added to show the CTC's standing in the theatrical world. In 1972 they were invited to the Fourth World Congress of the International Association of Theatre for Children and Young People, held in Montreal, Quebec, and Albany, New York, and in 1980 won a Margo Jones Award, presented by the American Theatre Critics' Association, for the encouragement of new playwrights through the regular production of new works.

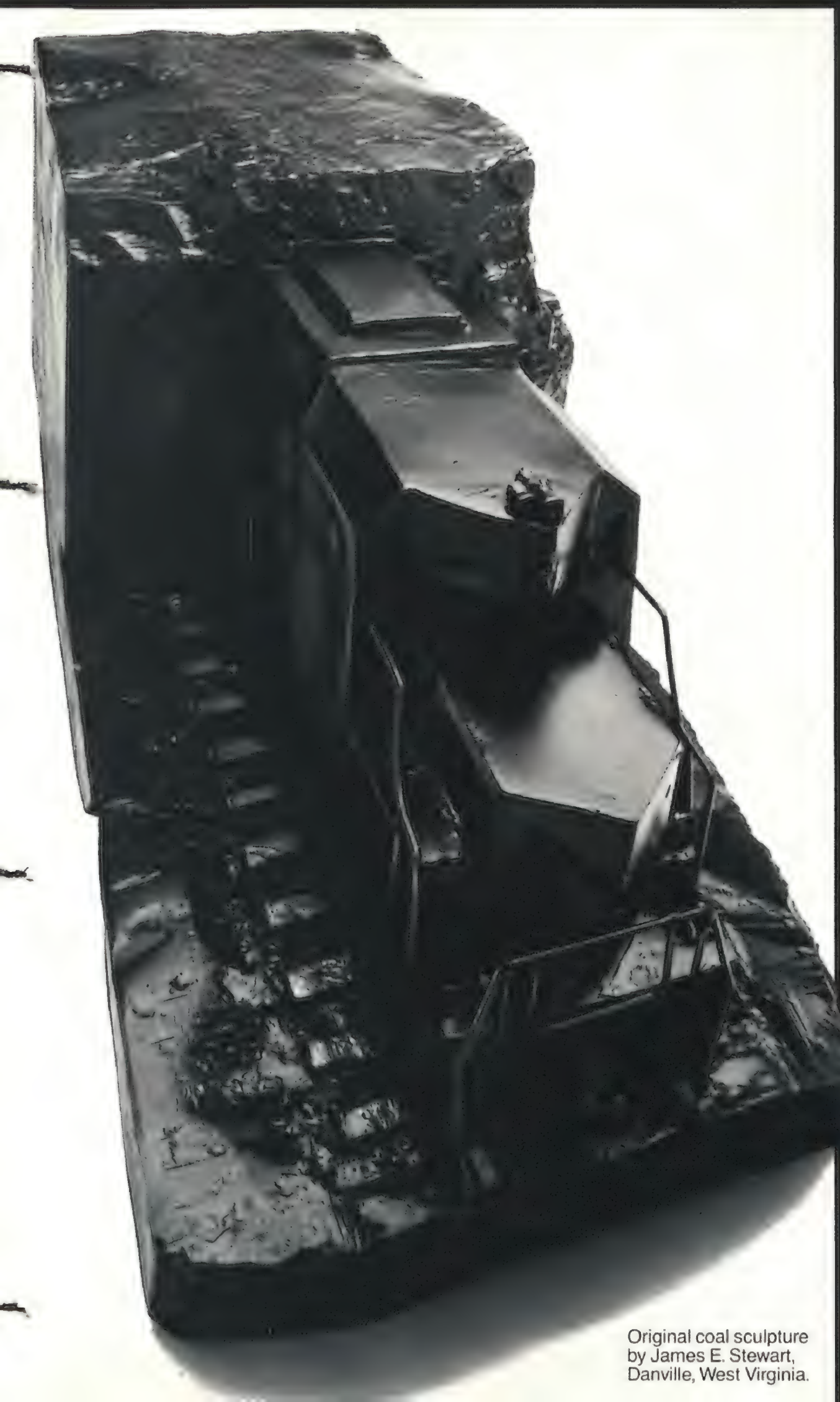
The company is not shy about producing the works of foreign playwrights. In 1976 we particularly enjoyed *A Room in Paradise*, adapted from Georges Feydeau's *L'Hôtel Paradis*.

Anyone coming to the Twin Cities would find the CTC a whimsical and exhilarating experience. It would be well to write ahead for tickets.

Viola C. McConnell
Minneapolis

Dear Sir: SMITHSONIAN seems intensely aware of so many wonderful things going on in the arts for children, perhaps you would like to know of the School for Creative and Performing Arts in Cincinnati, a part of our public school system. It has students in grades four through 12 from all over the Greater Cincinnati area. In addition to the regular academic work SCPA offers vocal and instrumental music, visual art, dance, drama and crea-

How does an important natural resource move?



Original coal sculpture by James E. Stewart, Danville, West Virginia.

On an important national resource.

America is less dependent on foreign oil these days.

One reason is coal. Another is the rail system that moves that coal reliably and economically.

Today's freight railroads move some 60 percent of the coal that powers our electric utilities—and they do it so efficiently that transportation accounts only for about 8 percent of the average residential electric bill.

Two powerful forces work to keep rail coal transportation economical.

One is competition. Railroads compete among themselves and with other forms of transportation. Coal companies compete with each other. And, coal itself competes with other sources of energy.

The other force is deregulation. Since 1980, railroads have been able to enter into long-term hauling contracts that assure predictable coal transportation costs. This keeps rates competitive and—just as important—it provides the service guarantees to encourage conversion to coal by industries and electric utilities.

America needs its coal as never before. And America's freight railroads are moving it as never before.

For more information, write: "Resource," Dept. 56, Association of American Railroads, 1920 L St., N.W., Washington, D.C. 20036.

Freight Trains. America's most vital moving force.

Omaha Steaks International®

Try a little tenderness

Now there's an easy way to make those special occasions truly memorable! Just try a little tenderness.

Candlelight . . . soft music . . . and . . . magnificient, aged Omaha Steaks. Tender, luscious, corn-fed beef with extraordinary flavor. Perfect.

Experts prepare each filet from the finest tenderloins. Their artistry in cutting and aging is your assurance of the utmost in enjoyment.

Your steaks will arrive frozen in a reusable picnic cooler. We guarantee your complete satisfaction. Order today!

Six 6 oz. Filet Mignons, 1¼" thick (reg. $47.50) $29.50
(plus $3.00 shipping/handling)

Save $18.00! Limit 2 per customer. Valid in 48 states until Nov. 30, 1982.

James Beard, noted food authority, says: "Omaha Steaks are everything I expect a good steak to be."

FREE WITH YOUR ORDER . . . The Omaha Steaks Cookbook, filled with easy-to-follow cooking instruction, helpful storing and serving hints, and recipes by James Beard, World Famous Food Authority. Also, a colorful catalog of gourmet treats with a 10% discount on your first catalog order. **Write for FREE catalog and 10% discount coupon only.**

Omaha Steaks International®

Use major credit card and

Call Free 1-800-228-9055

In Nebraska phone 0-402-391-3660 collect.

or write to: Dept. 1721, P.O. Box 3300 • Omaha, Nebraska 68103

SHOP SMART THIS SEASON

Since 1947, The Talbots has been offering a classic combination of timeless fashion and personalized service.

With an eye for good taste and lasting value, we've chosen the best of today's styles in clothing, shoes and accessories that you'll wear, and feel good about wearing, for seasons to come.

We also give you our famous personalized service. When you call, our personal shoppers will answer any questions, make suggestions, or help plan a wardrobe. We've been paying attention to details like these for over 35 years, and we always will.

Shop smart this season, and discover the classic combination of service and style. Send for The Talbots new catalog now.

FOR YOUR FREE SUBSCRIPTION TO THE TALBOTS CATALOG, CALL TOLL FREE 1-800-225-8200 (IN MASS. 1-800-232-8181) or write

The Talbots, Dept. BU, Hingham, MA 02043

Name _____

Address _____

City _____

State _____ Zip _____

The Talbots
Since 1947

tive writing. The training and experience that students receive at the school make them very much in demand in area professional arts organizations. They perform with the Cincinnati Opera, the symphony, the Cincinnati Playhouse and WLW Multi-Media as well as with dinner theaters. And on a recent trip to Washington the students performed *The Wiz* at the National Theatre.
Barbara Haven
Cincinnati

Mt. Kilimanjaro

Dear Sir: While we were living at Marangu on the slopes of Mt. Kilimanjaro, this story of how its peaks became so dissimilar was told us by the Wachagga people. It seems Kibo and Mawenzi both originally had fire, but Mawenzi's went out and so he went to Kibo with a large iron pot in hand, asking for fire. Kibo was tired and wanted only to sleep, so the answer came back: "NO!" Mawenzi repeated his request a second, and then a third time until finally, in anger, Kibo, seizing Mawenzi's big iron pot, hit him over the head with it. And that is why, it is said, instead of having a cone-shaped top like Kibo, Mawenzi has only jagged bumps and scars.
The Rev. James H. Wente
Castle Shannon, Pennsylvania

Dear Sir: John Reader's otherwise fine article omits reference to the man who discovered the frozen leopard, Richard Reusch, a Lutheran missionary of Russian birth. It was, of course, the tale of Reusch's discovery that inspired Ernest Hemingway's epigraph for *The Snows of Kilimanjaro.*

The missionary nurses shown in your photograph were associated with Reusch and accompanied him on the climb that led him to the discovery of the leopard.

My concern rises out of the warm memory I have of Reusch, whom I knew as a colleague at Gustavus Adolphus College in St. Peter, Minnesota, 20 years ago.
Allen B. Skei
Fresno

Lucid dreaming

Dear Sir: About Ruth M. Galvin's article on lucid dreams, for years I have been aware of my ability to recognize that I am dreaming. One of my more pleasant

The love is more important than the loveseat.

At Ethan Allen, we believe that the quality of family life surrounding our furniture is far more important than the furniture itself. For home is the nurturing ground for the wholesome values and attitudes that made our country strong.

It's the stage where the drama of life is played. Where children learn right from wrong. Where old-fashioned ideals like courage and honesty, respect for oneself and others are passed down from one generation to the next.

We are concerned about the erosion of these values that should be taught at home. We see the growing problems of society—broken homes, crime, drugs, and juvenile delinquency—and are shocked by the trauma they inflict on families, especially children.

Our over-burdened schools can no longer solve these problems confronting our society. There is only one place where we can regain the values and integrity that will cure these ills. We must turn to the home—our piece of the world—the place where it all begins.

For fifty years, Ethan Allen has been dedicated to helping Americans create beautiful environments for their homes. But we know it takes more than fine quality furnishings to make a good home. It takes the love, respect and understanding of those who share it together.

Ethan Allen Galleries

A Good Home Lasts a Lifetime.

© 1982 Ethan Allen, Inc. Danbury, Conn. 06810

We welcome your comments.

Free Offer from Pella.

A new book filled with ideas and information on Pella wood windows, doors, sunrooms and skylights.

24 full-color pages of photos, facts and figures on Pella products for all around the house — and even on the roof. Because now Pella offers a full line of ventilating and fixed skylights for your house. Plus you'll find Pella Windows of all styles, energy-efficient sliding glass doors, space-saving wood folding doors and the exciting Pella Sunroom. Send for your copy today.

Please send me a free copy of the Pella Idea Book. I plan to
☐ build ☐ remodel ☐ replace windows and doors.

Name _____

Address _____

City _____

State _____ Zip _____

Telephone _____

Mail to: Pella Windows and Doors
Dept. C16J2, 100 Main Street,
Pella Iowa 50219

Also available throughout Canada.

This coupon answered within 24 hours

©1982 Rolscreen Co

Pella.
The significant difference in windows.

dream involves enjoying a cigarette—after a ten-year abstention. Still tastes good but isn't expensive or habit forming. I also love to fly, breathe underwater and read novels. I wouldn't trade my ability to dream lucidly for a sack of gold.
Carol Jean Ridens
Douglasville, Georgia

Dear Sir: One aspect of my dream control is in the form of a play or movie, in which I am the star and my subconscious the director. I never see him, he is just an ethereal presence.

In one dream I was with a good-looking man whose face suddenly began to turn ghoulish. By concentrating as hard as I could I was able to change him back, but the minute I relaxed he became ugly again. I stopped the action of the dream and yelled: "OK—what's going on here?" The director answered "*I* want him ugly." I said "Well, *I* don't." As we argued, I was aware of all the crew and other actors in my dream sitting around complaining about the delay. Finally I said if I couldn't have the man good-looking, I would end the dream by waking up. Everyone was aghast at this threat and allowed me to have my way.

But the better I get at controlling the dream, the better the director gets as well. If he allows me to fly to avoid pursuers, he sneaks in flying pursuers. I accuse him of cheating, but he only laughs.

I have found a definite correlation between how powerful or powerless I feel in my waking life and in my dreams.
Marcy Price
Lomita, California

Dear Sir: Having been a lucid dreamer since earliest memory, I never knew that most other people were not until I read Mrs. Galvin's article. She extolls the virtues and benefits, but ignores a serious detriment: addiction. I am forever oversleeping. It takes considerable willpower to forgo bounding across town on seven-league boots or conversing with the denizens of Atlantis in order to get out of bed and go to work.
James Amery Thurman
Virginia Beach, Virginia

Dear Sir: Ruth Mehrtens Galvin's article states that "REM sleep is a time when our large muscles are completely paralyzed. We cannot walk or talk."

Pray tell, what is my husband doing, if

PURE NEW WOOL

WELSH FISHERMAN'S SMOCK
Crys Pysgodwr

Enjoy the comfort of this practical overshirt for men or women. It has been used by Welsh Fishermen for over 400 years. The material is a 12 oz. pure wool Welsh flannel. The smock is full cut with a boat neck and two convenient pockets. Colors include a soft blue-grey, coordinating well with denim.

Sizes S (32-34), M (36-38), L (40-42), XL (44)
Colors Blue-grey, Rust or Brown
No. 1673 Welsh Fisherman's Smock $46.00

State size and color
Please add $2.00 for shipping
Check, Mastercard or Visa
Satisfaction Guaranteed Send for our unique catalog
Visit our Seattle store at 1523 NW Ballard Way

David Morgan
Box 70190, Seattle, WA 98107
Telephone (206) 282-3300

Free Catalog of Mauna Loa® Macadamia Nut Delights

- HAWAII'S TASTE OF PARADISE
- PRESTIGIOUS HOLIDAY GIFTS
- KONA COFFEE GLAZED
- BRITTLED
- CHOCOLATED
- BUTTER CANDY GLAZED
- FRESH ROASTED
- AND MORE

Please detach and mail to address below.

Mauna Loa Gift Catalog
S.R. Box 3, Volcano Highway
Hilo, Hawaii 96720

Please send me a FREE catalog. SM 82

Name _____

Address _____

City _____

State _____ Zip _____

© Mauna Loa Macadamia Nut Corp., a C. BREWER company

"IT'S A PERFECTLY SAFE INVESTMENT IF NOTHING GOES WRONG."

If you listen carefully to people pushing investments, you'll catch the word "if." As in "if nothing goes wrong." Or, "if it all works out."

What "if" means is that a lot of investments depend on circumstances beyond anyone's control. It means they're risky.

But at America's Banks, you don't have to take risks to make money. Because the deposits you have in an individual bank are insured for up to $100,000.

What that means is your money will be safe and sound and growing no matter what happens. If it's in the bank, that is.

Talk with the professionals at your bank. They'll show you savings and investment plans that not only earn competitive interest rates, they earn peace of mind.

AMERICA'S BANKS

A FULL SERVICE BANK

SECURITY WITH NO IFS

© 1982 AMERICAN BANKERS ASSOCIATION

The Chivas Regal of Liqueurs.

Chivas Brothers make the world's finest Scotch.
And the same renowned Chivas quality and tradition goes into its equally-regal Lochan Ora Liqueur. With a unique taste all its own. Lochan Ora is to be lingered over—sipped slowly, savored fully. It's expensive but, then, good taste invariably is.

Lochan Ora.
The Imported Liqueur from Chivas Brothers.

70 PROOF • IMPORTED BY GENERAL WINE & SPIRITS CO., N.Y., N.Y.

not dreaming, when he thrashes around in the bed yelling "Pow, Pow, Pow!"?
Mary Lee Rath
Williamsville, New York
According to Dr. Allan Rechtschaffen, director of the University of Chicago sleep laboratory, a fair amount of dreaming takes place during non-REM sleep when there is no paralysis of the large muscles, as does most sleep talking. Some of the latter is associated with dreaming, some with no recalled content at all. Also, although characteristically the large muscles are actively inhibited during REM sleep, evidently the impulse to motor activity can be so great at times as to break through this inhibition. Ed.

Thames barrier

Dear Sir: I much enjoyed Jane Wholey's article, but found myself asking what happens to the riverbanks below the barrier in the event of an upsurge, when the river level rises there because the barrier blocks its path toward London? How will Tilbury docks and Gravesend hold up? And the flats lower down—Canvey Island, made largely by the Dutch in the 17th century, and the marshes around Leigh-on-Sea?
Ernest F. Wise
Los Angeles
Banks below the barrier have all been heightened to the mouth of the Thames; engineers claim they will contain any tidal surge until the year 2030. Ed.

Dear Sir: You've done it again, all the way from cement-soled Dutch slippers on the rampant Thames to the melting ice cap on Kilimanjaro. One felt like being in Alice's Wonderland, seeing "gas cocks" that hold back the stormy North Sea and then pictures of lobelias that would have frightened Alice's rabbit. It all showed and told one a little more about this magnificent universe with all its challenges for Man's tenancy.
Falconer Smith
Charles Town, West Virginia

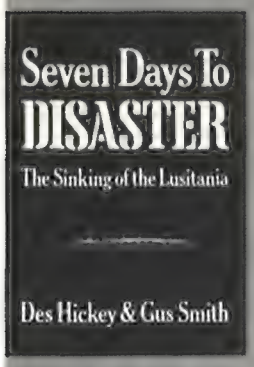
Mall

Dear Sir: For your remark about shoveling dripping muck into a sack held by a "muscular and imperturbable young lady," followed by this little gem: "No Vassar girl would have done that work in *my* day," there's a lovely Latin word, but

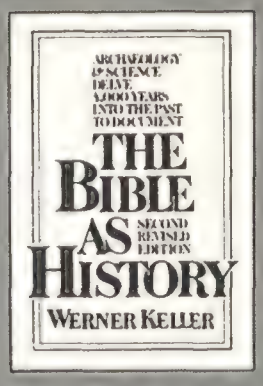
TAKE ANY 3 ALL FOR 99¢

(First price is publisher's list. **Boldface** shows member price.)

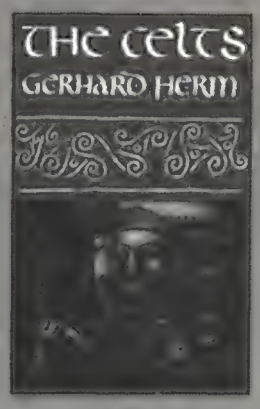
values up to $72.45 with trial membership.



5587. $14.95/$11.50

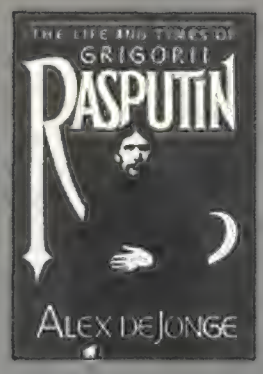

ARCHAEOLOGY & SCIENCE DELVE 4,000 YEARS INTO THE PAST TO DOCUMENT
THE BIBLE AS HISTORY
SECOND REVISED EDITION
WERNER KELLER

3012. $14.95/$10.95

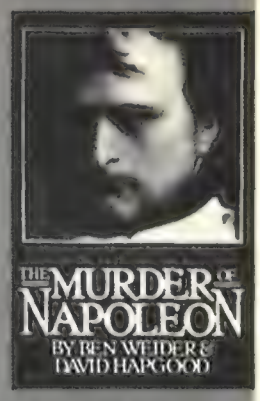


5462. $12.50/$8.50

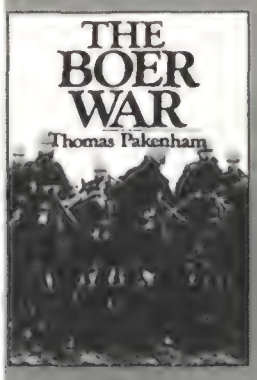
4663. $24.50/$13.95



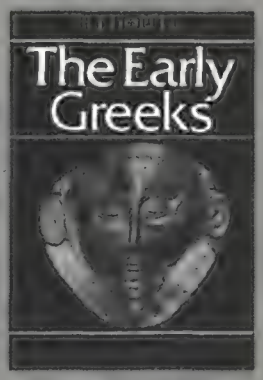
5058. $17.95/$12.95



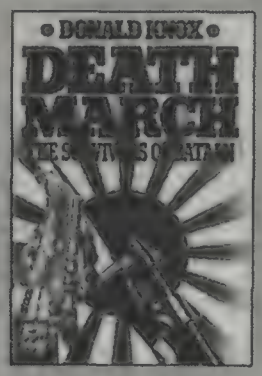
5082. $14.95/$10.95



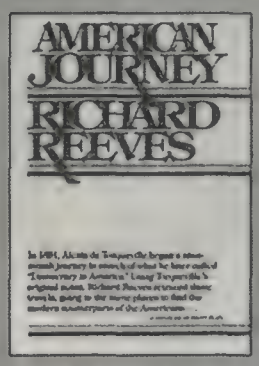
8466. $20.00/$12.50



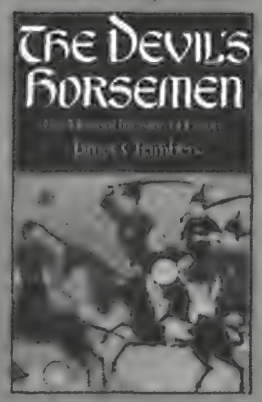
5504. $25.00/$13.00



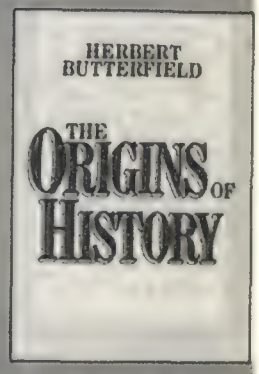
4507. $19.95/$12.95



5488. $15.95/$11.50

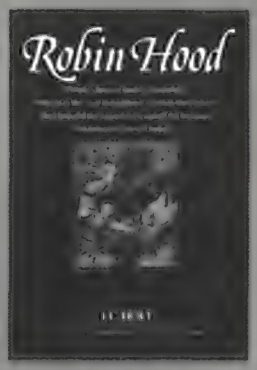


8284. $11.95/$8.95

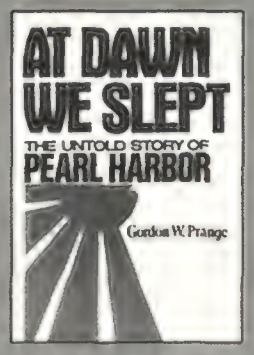


3715. $20.00/$12.95

3459. $20.00/$13.95

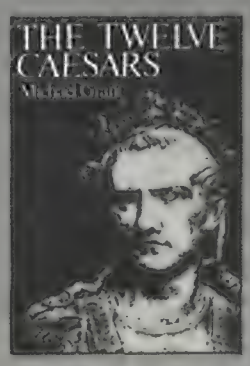


4952. $17.95/$12.50

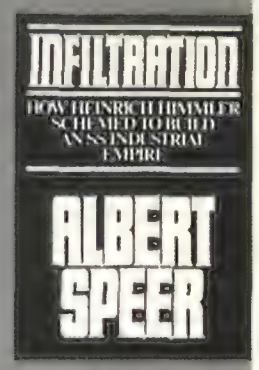


3970. $22.95/$14.95

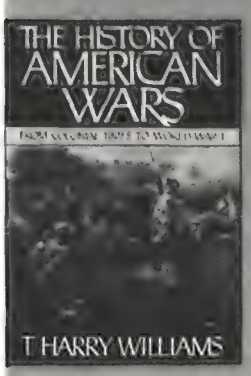
8656. $19.50/$13.95



5652. $15.95/$10.95

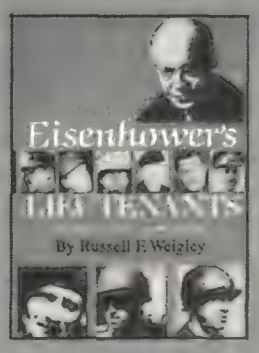


3723. $15.95/$11.95

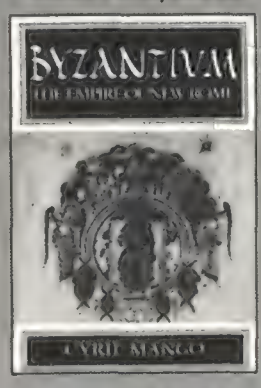


3400. $20.00/$13.95

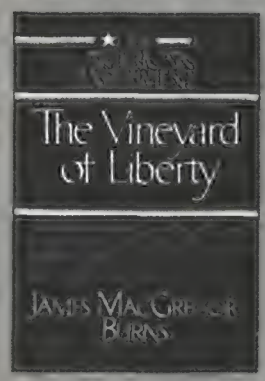
3756. $17.95/$12.95



3111. $22.50/$14.50



2840. $17.50/$12.95



4754. $22.95/$13.95

2683. $17.50/$12.95

No matter what areas of history you enjoy reading about most, you'll find that The History Book Club offers some of the finest selections being published today. And no book club we know of offers greater savings—an average of 33% off publishers' list prices.

You can save even more now by taking advantage of our introductory offer. Select any 3 books on this page all for just 99¢ (values up to $72.45) when you take a fourth book at the low members' price. Your total savings as a trial member, including this introductory offer, can be more than 50%.

How the Club Works: As a Club member, you'll be able to choose from the 150-200 books featured each month. Our books are always equal to the publishers' editions, never "economy reprints," and available at savings of $3, $4, $5, or more off bookstore prices. You need take only four more books in the next two years, after which you'll save even more through bonus books which you may choose from our entire list.

Every four weeks (13 times a year) you will receive our *Review* and a dated reply card. If you want the Editors' Choice, do nothing, the book will come automatically. If you want another book, or no book at all, return the card by the date specified. (Book shipments will be charged to your account at low members' prices, plus postage-and-packing.)

If you should get an unwanted book because you had less than 10 days to decide, you may return it and pay nothing. We guarantee postage.

The History Book Club, 40 Guernsey Street, Box 790, Stamford, CT 06904

Please enroll me as a trial member and send me the four books whose numbers I have entered below. Bill those on the left at 99¢ for all three and the fourth at the low members' price, plus postage-and-packing.

[ ] [ ] [ ] [ ]

I may return the books within three weeks at your expense and owe nothing. Or, I will buy four more selections within the next two years (*not counting my choices above*). Membership is cancellable anytime thereafter. All Club purchases are at low members' prices, and a postage-and-packing fee is added to all shipments.

ST-62K

Print Name_____

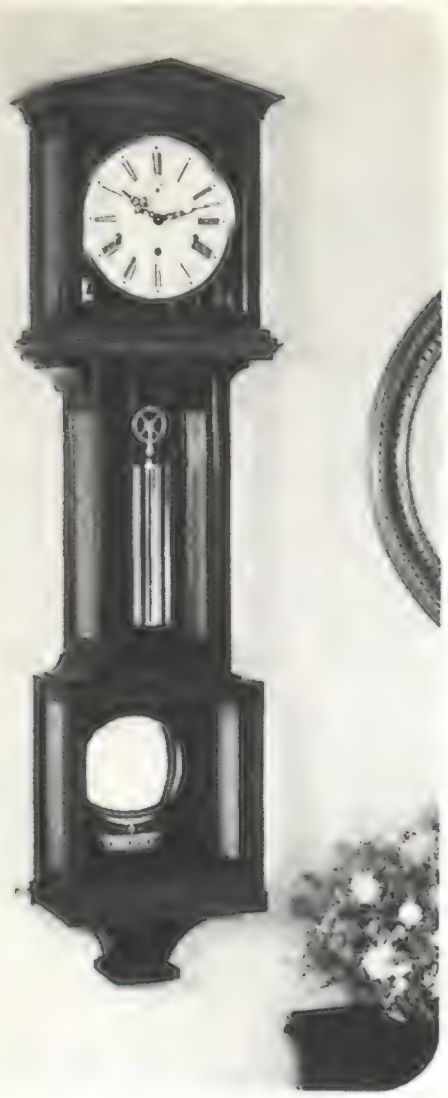
Address_____ Apt. # _____

City_____

State_____ Zip_____

In Canada: Mail to U.S. address.

ST82G



The rare 19th Century Viennese Lantern Style Regulator Clock.

The classic Viennese Lantern Clocks were originally created by the Grossuhrmachers of the Black Forest during the 19th Century to individual order. Now, private collectors *only* are invited to acquire this exceptional replica, superbly crafted by the Hamilton Clock Company. Solid brass precision movement, with Westminster chimes. Cabinet is mitered and coped fine wood construction, in your choice of solid mahogany or solid walnut. Dimensions are: 45 inches high, 12 inches wide and 8 inches deep. This edition will be strictly limited to 1500. To subscribe or for further details, write:

The Collector's Classic Edition Society, Ltd.

(A wholly owned subsidiary of Hamilton Watch Co., Inc.)

Dept. 305
941 Wheatland Ave.
Lancaster, PA 17604
Call toll free 800/233-0281, Ext. 175
In PA call: 717/394-7161, Ext. 175

I'm so angry I can't think of it. Descending to your depth, Mr. Park—Princeton, I presume?
Suzanne V. Chapman
Vassar '39
Tucson
Ted Park is a kindly man (Yale '39, not Princeton) who hates to make people mad. He says he has a habit of throwing in this sort of thing now and then to see if anyone is paying attention. Ed.

Computer crime

Dear Sir: Gina Kolata's article is disturbing and frightening, but what she leaves unsaid is even more so. Stealing money and perusing classified documents is bad enough, but consider this: at the present time many election returns are counted, compiled and reported by computer. Should this become universal, what couldn't a crew of clever computer hackers do to democracy?
Arden R. Benson
Portland, Oregon

Association aficionados

Dear Sir: Indeed, one is presented with a bewildering array of worthy organizations. But certainly none is more outstanding than the American Council of Spotted Asses, headquartered in Fishtail, Montana. You need not own a spotted ass [below] in order to be a member, only to profess an affection for these lovable beasts. There are no annual dues, and you would be proud to carry this esteemed group's unique membership card, for you would be helping to promote an exotic and useful breed.
Homer F. Sharp jr.
Covington, Georgia

ome of this world's most WONDERFUL Christmas Cards,

delightfully fashioned in the Spirit of Christmas Past, with greetings from Shakespeare, Dickens, O. Henry, and others, are now available (with many other good things) at astonishingly reasonable prices in the new Cahill Catalog.
Cahill & Co., 142 Palisade St.
Dobbs Ferry, N.Y. 10522

FREE FULL COLOR **PENDLETON** MAIL ORDER CATALOG
THE LARGEST SELECTION OF
PENDLETON
SPORTSWEAR ON THE WEST COAST
Bill Tosetti's The PENDLETON Specialist For Men and Women
Write Dept ST
17632 Chatsworth St., Granada Hills, CA 91344

The Reader's End Table

Especially for readers who can't part with their newspapers and magazines! Solid pine cabinetry. 22"h x 19¾"w x 14½"d. Finished in antique (dark) pine or as a kit.

Send check or money order to: Yield House, Department S210, North Conway, N.H. 03860.

Charge orders call toll-free: 1-800-258-4720. New Hampshire: 1-800-552-0320.

____ Finished table(s) 138A **$89.95**
____ Table kit(s) 138K **$69.95**
Add $8.00 each for packaging and shipping.
____ Yes, please send me a copy of your new fall catalog.

Name (please print)

Address

City

State Zip

Yield House®

Life, liberty and the pursuit of high interest.

Getting life insurance protection is not difficult. The problem has always been how to combine protection with a way to respond to a changing economy.

A solution is John Hancock Variable Life Insurance.

It guarantees you the initial amount of insurance you buy. And, this policy allows *you* to decide where a portion of your premiums will be placed—in stock, bond, or money market accounts.

As a result, you have an opportunity to increase your coverage as well as your cash value, although the cash value is not guaranteed.

If you're looking for a life insurance policy that combines protection with a choice of separate accounts and an opportunity to earn high interest, take a look at John Hancock Variable Life.

I need to review my life insurance program.

Please send me more complete information and a Prospectus, including charges and expenses. I'd like to read the materials carefully before investing or forwarding funds.

Name _____

Address _____

City _____ State _____ Zip _____

Check here if you are an insurance agent or broker ☐

Mail to: John Hancock Variable Life Insurance Co.
John Hancock Place T-54, P.O. Box 111
Boston, Massachusetts 02117

John Hancock®
Variable Life Insurance Company

86

We can help you here and now. Not just hereafter.

These policies are available in those jurisdictions which permit the sale of John Hancock Variable Life Insurance.

FIND OUT HOW EXCITING

1983 BONNEVILLE

You are in for a stimulating experience.

This is a car that was designed and engineered to civilize rough roads, as well as pamper you and your friends.

So go on, head for the open road. What you'll feel first is the quiet confidence of the standard 3.8 liter V-6 engine, or even more powerful available 5.0 liter V-8.

PONTIAC **WE B**

ROOM FOR SIX CAN BE

Then, as you encounter a curve, you'll see the real beauty of this exciting 4-door sedan. And experience how smooth and responsive our 1983 Bonneville really is.

This is what makes it a Pontiac. And what will make you a Bonneville lover.

Some Pontiacs are equipped with engines produced by other GM divisions, subsidiaries, or affiliated companies worldwide. See your Pontiac dealer for details.

GM

UILD EXCITEMENT

KEEP A BEAUTIFUL RECORD OF YOUR WORLD TRAVELS

20" x 30" FULL COLOR MAP FRAMED IN GOLD-TRIMMED WALNUT, COMPLETE WITH DESTINATION PINS, LINE RULER AND MARKING PEN $22.95*

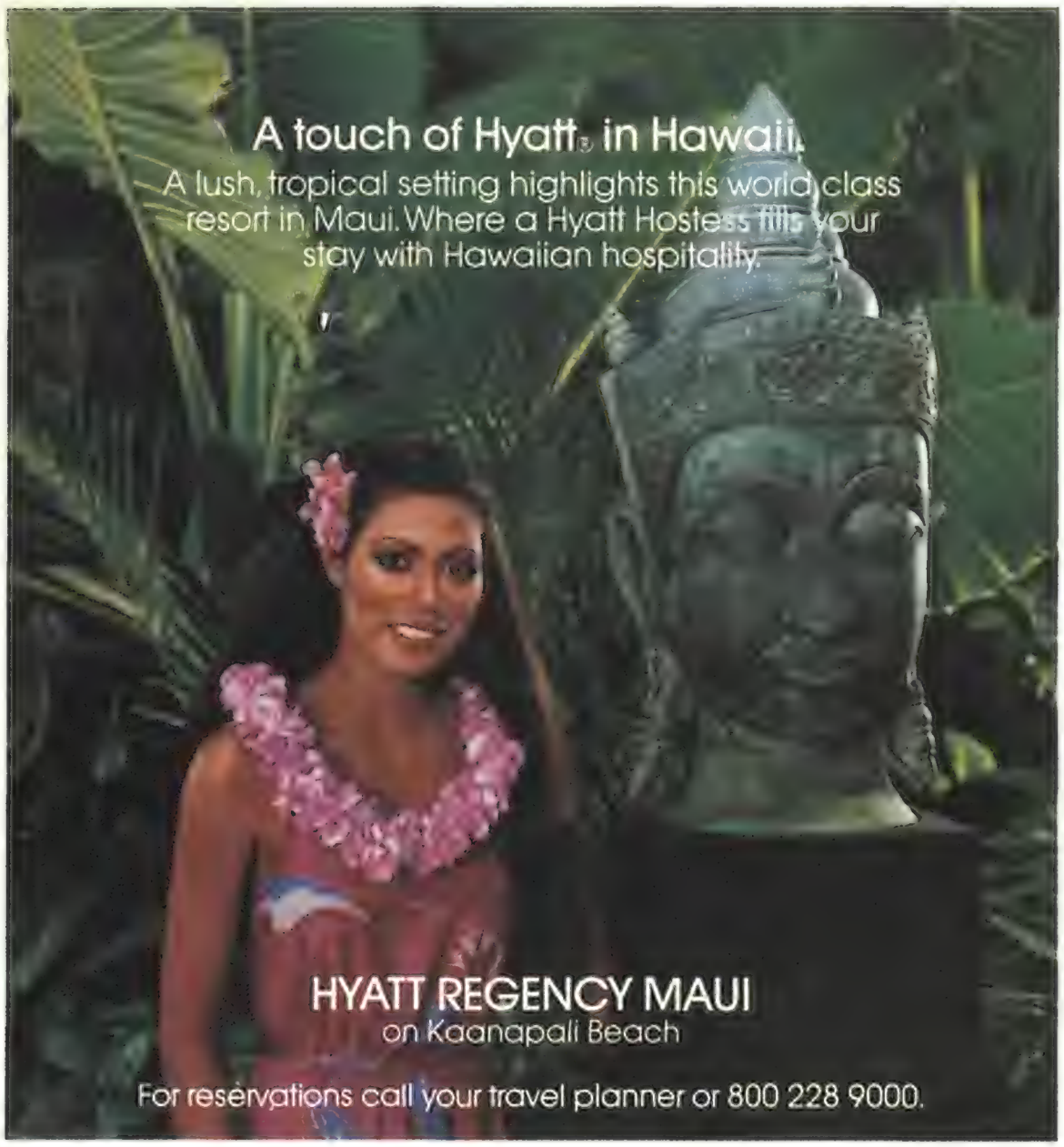
Stimulate a world of conversational interest. This handsome Map is printed on heavy artcraft stock, framed in rich walnut finished wood, ready to hang. Comes with charting kit which includes: map pins, line ruler and marking pen. Order today. Send check or money order. No C.O.D.'s.

Deluxe $22.95 (2 for $42. more @ $21.00 ea.)
Personalized—name hand lettered add $2. ea.
***Add $3.50 ea. shipping & handling. United States map—same size and quality available.**

PHONE ORDERS (213) 986-1866

THE CHART HOUSE ☐ WORLD ☐ U.S.
13263 Ventura Blvd., Studio City, CA 91604
Send ____ maps @ $____ each. Dept. SM-102
☐ MASTER CHARGE ☐ VISA ☐ Check enclosed.
Card # _____ Exp. _____
Signature _____
Name _____
Address _____
City _____ State _____ Zip _____

MONEY BACK GUARANTEE!


A touch of Hyatt® in Hawaii.
A lush, tropical setting highlights this world class resort in Maui. Where a Hyatt Hostess fills your stay with Hawaiian hospitality.
HYATT REGENCY MAUI
on Kaanapali Beach
For reservations call your travel planner or 800 228 9000.

Around the Mall and beyond

Not long ago I was vouchsafed a glimpse of one of nature's strangest creatures, one still deemed seriously endangered. I was in Florida, and it was early morning, in that mystical time before the sun rises and puts everything into perspective. I was gazing at the still water of a brackish channel when there was a swirl right where my eyes were fixed, and then there were two black rings, and then two more, breaking the surface.

A mother manatee and her calf were lolling just below the sheen of the water. The rings were their nostrils, and in the stillness I could hear the big aquatic mammals breathing.

I watched for a while, and then with a gentle slop of water the two rolled sideways lazily and dove under, and I glimpsed the mother's fat, brown flank with white scars left by propellers. Collisions with powerboats are one thing that has kept manatees endangered (SMITHSONIAN, December 1974). Signs on Florida waterways now warn boatmen to slow down as they pass manatee areas—like roadside signs telling of a deer crossing.

I am enchanted with big, rare animals of any persuasion. Years ago, in southern New Hampshire, the regional game warden wrote a most useful and entertaining column for the local weekly, and about twice a year he would describe the sighting of some incredible beastie—a 30-foot serpent in a marshy pond at sunset, a giant moose crashing through a new growth of white pine down to Sawyer's dairy farm, just before sunrise.

Inevitably, the big snake would be seen by two pout fishermen (a horned pout is Yankee for catfish, all you outlanders) after a long afternoon on the water with

KAISER. THE THOROUGHBRED PORCELAIN.

Now, for the very first time, some of the most magnificent creatures in nature are yours to capture and admire. Majestic thoroughbreds, exquisitely recreated in Kaiser porcelain. "Meteor," rearing, 12" h, $700. "Finale," running, 7" h, $350. "Colt, Lying," 2½" h, $130. "Finale" and "Colt, Lying" are offered exclusively for a limited time by Fine Jewelers Guild stores.

KAISER
PORCELAIN
Bavaria
West Germany

The Fine Jewelers Guild is a national organization of independent member companies specializing in fine jewelry, exclusive timepieces and quality giftware:
Arizona—Rosenzweig's (Phoenix, Scottsdale, Mesa, Tucson, Flagstaff) • **Arkansas**—Stifft's (Little Rock) • **California**—Granat Bros (San Francisco, San Jose, Citrus Heights, Santa Rosa) Slavick's (Los Angeles, Arcadia, Westminster, Orange, West Covina, San Diego) • **Colorado**—Argenzio Brothers (Denver, Boulder, Ft. Collins) • **Florida**—Jacobs (Clearwater, Altamonte Springs, Tampa) • **Georgia**—Bailey Banks & Biddle (Atlanta, Augusta) • **Illinois**—Bailey Banks & Biddle (Chicago Metropolitan Area) • **Louisiana**—Hausmann's (New Orleans Metropolitan Area) Rider's (Baton Rouge) • **Maryland**—Bailey Banks & Biddle (Gaithersburg, Columbia, Landover, Bethesda, Annapolis, Baltimore) • **Massachusetts**—Stowell's (Boston) • **Michigan**—Morgan's (Lansing, Okemos) Wright Kay (Birmingham, Dearborn, Sterling Heights, Ann Arbor) • **Minnesota**—Jacobs (Roseville) • **Missouri**—Hess & Culbertson (St. Louis/West County) Jaccard's (Kansas City/Ward Parkway) • **New Jersey**—Bailey Banks & Biddle (Cherry Hill) Wiss & Lambert Bros. (Montclair, Wayne, Woodbridge) • **New Mexico**—Mindlin (Albuquerque) • **North Carolina**—Bailey Banks & Biddle (Charlotte, Durham, Winston-Salem) • **Ohio**—Cowell & Hubbard (Akron, North Randall, North Olmsted, Mentor) Max Davis (Toledo) • **Pennsylvania**—Bailey Banks & Biddle (Philadelphia, Pittsburgh) • **Rhode Island**—Stowell's (Warwick) • **Texas**—Corrigan's (Dallas/NorthPark, Denton, Abilene, Wichita Falls, El Paso, Austin, San Angelo, Victoria, College Station, Houston) Hertzberg's (San Antonio, McAllen) Kruger (Midland, Odessa) McNeel's (San Antonio) Wagner's (Amarillo) • **Utah**—Bohm-Allen (Salt Lake City, Ogden) • **Virginia**—Bailey Banks & Biddle (McLean, Fairfax, Virginia Beach) • **Wisconsin**—Bailey Banks & Biddle (Milwaukee) • If you prefer the convenience of shopping at home, please order by sending your check, adding tax where applicable, to Fine Jewelers Guild, Kaiser Porcelains, Box 222219, Dallas, Texas 75222.

Washington: Magnificent Capitol 26" x 20" (A-14) **$7**

Washington's winter splendor

portrayed in three photographic art posters by world renowned photographer, Fred J. Maroon.

Winter in Georgetown 24" x 18" (A-11) **$7**

Evening in Georgetown 24" x 18" (A-12) **$7**

Buy three – receive one free!

Autumn Publishing Inc.
Dept. S, P.O. Box 3387
Alexandria, VA 22302

Allow two weeks for insured delivery.
Satisfaction guaranteed.

☐ Money order/check enclosed
Credit card: ☐ MasterCard ☐ VISA

Credit card phone orders 703 931-6200

Acct. # _____
Exp. Date _____ *Tel.* _____
Name _____
Address _____
City _____
State _____ *Zip* _____

Magnificent Capitol: (A-14) ____ *at $7 each* ____
Winter in Georgetown: (A-11) ____ *at $7 each* ____
Evening in Georgetown: (A-12) ____ *at $7 each* ____
Free selection code # (A-__ __) *Subtotal* ____
VA residents add 4% tax ____
$1.85 postage & handling for each separate address ____
Total $ ____

Call for framed posters at $49.85

Submerged mother manatee with calf

a cooler of beer, and the moose, breathing smoke from his nostrils, would be reported by Sawyer's hired hand—and everyone knew how *he* was after he'd been into the cider barrel. But I didn't care. I wanted that moose to be there, and the black panther that a tourist from Fitchburg reported, and the giant bear tracks, and the great snake. The world needs to believe in such things. And I myself can now swear to the existence of manatees.

Collecting one of the world's rare creatures for a museum or a zoo opens up a can of worms, according to a spring symposium and workshop, cosponsored by the Smithsonian and the American Law Institute-American Bar Association with the cooperation of the American Association of Museums, on the legal problems of museums and their administration. The fact is that if you have a chance to collect a pair of some endangered species to let them breed and keep the species going for the edification of future generations, you could well be breaking the law. In their eagerness to preserve rare critters, the legislators often have made it extremely difficult, if not illegal, for preservationists to preserve. Even collecting animals killed on the highway—or birds that slam into tall buildings during their migrations—and innocently shipping them to museums can be serious violations of the law. The innocent collector should contact the museum of his choice before sending off dead specimens.

Send for our **PAPERWEIGHT CATALOG**

- discover the beauty of glass paperweights
- collect art with great investment potential
- examine 128 pages in full-color of the finest antique and contemporary paperweight masterpieces
- send for it today $6.00

Name _____
Address _____
City/State/Zip _____

L.H. SELMAN LTD.
761 Chestnut St..Suite13. Santa Cruz. CA 95060

Plains Indian Art & Artifacts.

Free Catalog shows painted shields, mounted trophy buffalo skulls, war arrows, peace pipes, chokers, breast plates, war clubs, horse dance sticks, star quilts and more. Exclusive source. Hand-made with traditional tools and authentic materials. Many have interesting stories to tell from Cheyenne, Sioux and Blackfoot heritage. Collector's items, unique gifts and stunning decorations.

Write or call:
PRAIRIE EDGE P.O. Box 8303 Department J
Rapid City, South Dakota 57701 Area Code (605) 341-3620

Saving beautifully since 1898

And still the most distinctive way to reduce your heating bills. With wood or coal. Efficiently. Conveniently. Without the cost or bother of a messy coal conversion kit.

Outside, exquisite porcelain enamel on cast iron. Inside, more heat-retaining fire brick per cubic inch of firebox than any other stove. A beautiful way to save money.

GODIN

In your choice of sizes and colors. Fire viewing window standard on all models. Sold through local dealers.

For color literature, send to:
STONE LEDGE CO., Dept. SM10
170 Washington St., Marblehead, MA 01945

Name _____
Address _____
City _____
State _____ Zip _____

L.L.Bean®

Flannel Sheets

Take the chill out of getting in bed on cool evenings. Made of a tightly woven, softly napped flannelette fabric. Whipstitched ends. Cut generously to allow for normal shrinkage. Machine Wash and Dry.

Solid Color Flannel Sheets. 50% cotton/50% polyester. Colors: Blue. Pink. Gold. Camel. White. #7681W Twin Size, **$11.00 ppd.** #7682W Double Size, **$12.50 ppd.** #7683W Queen Size, **$15.00 ppd.** #7464W, King Size, **$19.00 ppd.**

Striped Flannel Sheets. Slightly heavier weight blend of 80% cotton/20% polyester. Not available in White or King Size. Colors: Blue. Pink. Gold. Camel. All with natural background. #7481W Twin Size, **$11.50 ppd.** #7488W Double Size, **$13.00 ppd.** #7489W Queen Size (No Pink), **$16.00 ppd.**

Flannel Pajamas

Comfortably warm for cold nights. Amply cut from 100% cotton flannel. Button front top with breast pocket. Drawstring waist. Women's have elasticized waist. Treated to minimize shrinkage. Machine Wash. (Wash Red pajamas separately the first few times.) Colors: Red. Tan. Lt. Blue. Women's sizes: Sm. (6-8), Med. (10-12), Lg. (14-16). #4199W, **$18.50 ppd.** Men's sizes: Sm. (110-135 lbs.), Med. (135-165), Lg. (165-185), XLg. (185-210). #1998W, **$18.50 ppd.** Men's Long sizes: for men over 6' tall. (No Small) #1996W, **$20.50 ppd.**

Chamois Cloth Shirt

(For Men, Women and Children)

Mr. Bean's favorite hunting and fishing shirt. Well made from a 7 oz. cotton flannel, thickly napped on both sides. Warm, wind resistant and comfortable to wear. Machine Wash. Colors: Navy. Bright Red. Tan. Green. Slate Blue. Ivory. Men's Regular sizes: 14½ to 20, #1611W, **$18.25 ppd.** Men's Long sizes: 15 to 19, #1612W, **$19.25 ppd.** Women's sizes: 6 to 20, #4311W, **$18.25 ppd.** Children's sizes: 8 to 18, #4335W, **$17.00 ppd.** (No Ivory).

Wood Carrier

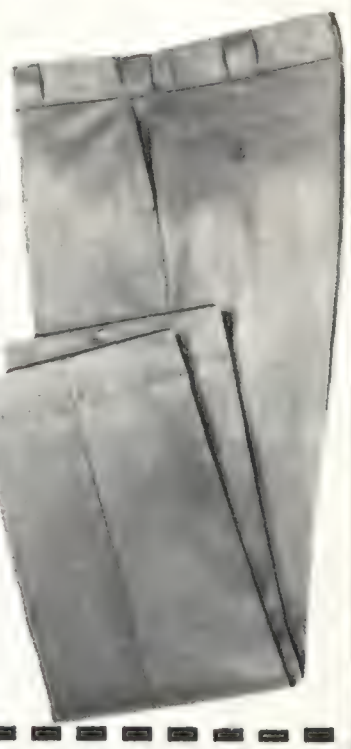
Manufactured by us from heavy duck. Leather handles are rounded for a comfortable grip. A practical arrangement for carrying stove or fireplace wood. No dirt or bark on the floor with this convenient carrier. Size: 20"x42" #8731W, **$9.75 ppd.**

Chino Pants

(For Men and Women)

You'll get more wearing pleasure from these pants than any others you own. Made of high grade combed cotton/polyester twill. Permanent crease; washable. No ironing required. Neat looking for sports or work. Color: Tan. Waist sizes: 24, 25, 26, 27, 28, 29. Inseams: 30" and 32". Even waist sizes: 30 to 44 plus 31 and 33. Inseams: 29", 30", 31", 32", 33" and 34". #1822W, **$15.25 ppd.**

Lined Chinos - Same sturdy construction but fully lined with our famous tan Chamois Cloth, a comfortably warm 100% cotton flannel. Men's even waist sizes: 30 to 44. Inseams: 29", 31" and 33". #1824W, **$27.50 ppd.** Women's even sizes: 8 to 20. Inseam 31". #4435W, **$27.50 ppd.**



Send for our FREE Christmas Catalog

Please Ship Postage Paid **100% Guarantee**

Item #	Qty.	Color	Size	Description	Price	

Add 5% Maine Sales Tax On Shipments To Maine Addresses TOTAL

☐ Check Enclosed ☐ Master Card ☐ VISA ☐ American Express

Card No._____ Exp. Date_____

☐ **SEND FREE CHRISTMAS CATALOG**

Name_____

Address_____

City_____ State_____ Zip_____

L. L. Bean, Inc., 1061 Casco St., Freeport, ME 04033

The Aviator Shirt.

Authentic. Manufactured by Van Heusen—the people who supply most of America's leading airlines. Features button-through flap pockets, one with pencil slot. And epaulets, naturally. Collar looks neat and correct worn open or with tie. Extra-long tail. This special edition Van Heusen shirt is cut for comfortable fit, and smartly tailored of military-weight poplin. The 65% Dacron® polyester/35% combed cotton fabric delivers the comfort you want plus the permanent press convenience you demand. Choose khaki, blue or white. Short sleeves $17. Long sleeves $18.

® DuPont registered trademark

Size Chart for the Aviator Shirt

Neck Size	14½	15, 15½, 16, 16½, 17	17½
Sleeve Length	Med. (32/33)	Med. (32/33) or Long (34/35)	Long (34/35)
When ordering, indicate sleeve length by using letters M or L.			

Neck sizes for short sleeve shirts: 14½ to 17½

LONG SLEEVE @ $18

Qty.	Color	Neck Size	Sleeve Length M or L
	White (19-567X)		
	Blue (19-568X)		
	Khaki (19-569X)		

SHORT SLEEVE @ $17

Qty.	Color	Neck Size
	White (19-560X)	
	Blue (19-561X)	
	Khaki (19-562X)	

☐ **Please send free catalog**

Add $2.50 per order for shipping and handling, plus local taxes where applicable.
Make checks payable to Baker Street Shirtmakers
Mail your order...or call toll free (800) 528-6050

☐ Personal Check or Money Order ☐ Visa ☐ American Express ☐ MasterCard

Card # _____ Exp. Month _____ Year _____

☐ Mr. ☐ Mrs. ☐ Ms. _____

Address _____

City _____ State _____ Zip _____

Baker Street® Shirtmakers
Creators of classic shirts at affordable prices
281 Centennial Avenue, Piscataway, New Jersey 08854

BYF

"The law is a ass, a idiot," says Mr. Bumble in *Oliver Twist.* But the fact is, it's there, and in this nation, at least, we are governed by it. We generally find it better to do the best we can with it than to defy it. I think of that as *The Caine Mutiny* syndrome.

Kangaroos are on the endangered list, and the Australians complain bitterly about the fact that protected kangaroos are practically taking over the country. And so it was that when I sliced a golf ball into a clump of small trees at a pleasant little golf club in southern Queensland yesterday, it landed right beside four kangaroos, a large male and two females, one with a "joey" in her pouch.

The ball had a good lie, for my slice wasn't as irredeemable as usual. (I play golf desultorily because of a niggling hope that somewhere amid nine holes—I can't stand it for more than nine holes—I will experience the awesome wonder of a cleanly hit ball.) As I approached, the male kangaroo watched me with knowledgeable contempt, scratched, then hopped lazily away. The females simply lay back, wantonly, heads raised to watch me, not deigning to move away. It was then that I saw the joey—or rather the joey's hind leg—jutting ridiculously from the pouch. It was down inside, asleep in the warm dark. The sight so intrigued me that I relaxed from the pressure of golf, swung unthinkingly, and made a marvelous iron shot, the ball soaring over the trees, straight and true, landing not quite on the distant green, but in the sand trap just this side of it. Finest shot of the day, thanks to those protected kangaroos.

This is being written at a small resort town on the Queensland coast, 100 miles north of Brisbane, where we are visiting my wife's sister and her husband. It is literally half a world away from the Mall—as far "beyond" as I can get—and because of that it seems appropriate to talk about this place and indeed this country. "Letter from Noosa Heads," perhaps we should call it.

Kangaroos abound, but not the koala bear, the appealing symbol of all that is "cute" in Australian natural history. I've only seen one once in the wild. But at this place where a river meets the sea I have tried to keep a list of birds that my hosts take for granted, but which are wonderful to me.

Write for our booklet. Send $5 to Century Furniture Company, P.O. Box 608, Dept. N-16, Hickory, NC 28603.

"Estate planning? Why me? Everything's in Harry's name."

The new estate tax law could work against you if you don't watch out.

Even if your name isn't on a single piece of the family's property, your estate could end up being the one forced to pay all the death taxes.

That's why, as a New York Life Agent, I'd like to talk to both you and your husband about estate planning.

You see, if he dies before you, you can now inherit everything without paying one penny of federal estate taxes.

But all the family's property then ends up in your estate. And, unlike you, your heirs can't get off scot free. They'll have to pay the taxes when you die. Every cent.

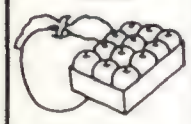
New York Life insurance, though, can guarantee all the funds they need. When they need them, for just pennies on the dollar.

So ask me, your New York Life Agent. I'll help you and your husband make sure the new estate tax law works for, not against, both of you.

"Ask me."

New York Life Insurance Company, 51 Madison Avenue, New York, N.Y. 10010. Life, Group and Health Insurance, Annuities, Pension Plans.

The Original One and Only
Fruit-of-the-Month Club

Christmas	January	February
Royal Riviera® Pears	Crisp Mountain Apples	Royal Oranges
March	April	May
Royal Grapefruit	Hawaiian Pineapples	Wild 'n Rare® Preserves
June	July	August
 Gala Apples	Giant Kiwi Berries	Exotic Nectarines
September	October	November
Oregold® Peaches	Alphonse LaValle Grapes	Royal Beurre® Bosc Pears

A masterpiece each and every month!
A gift from Harry and David really shows you care . . . because we do. Our fruit is hand-selected according to the highest standards for size and color, and packed with personal care. The quality is unequaled — we guarantee it.
3-BOX CLUB: Order Gift No. 111 ..... $38.95 delv'd
Surprise 'em with gorgeous Gift Boxes for Christmas, January and February!
5-BOX CLUB: Order Gift No. 141 ..... $62.95 delv'd
Keeps coming and coming! Christmas, January, February, May and September!
8-BOX CLUB: Order Gift No. 151 .... $103.95 delv'd
Delight 'em to pieces, again and again — Christmas, Jan., Feb., May, Aug., Sept., Oct., and November!
12-BOX CLUB: Order Gift No. 201 ... $157.95 delv'd
A Gift Box every month, all year around!
EASY TO ORDER: Send list of names plus check or money order. (No C.O.D.'s) Tell us how to sign greetings. Everything's beautifully packaged.

Send your orders to:
Harry and David®
Dept. 525-A Medford, Oregon 97501
Visit the Bear Creek Store in Medford

WE GUARANTEE COMPLETE SATISFACTION OR YOUR MONEY BACK

WANT OUR FREE CATALOGS? THEY'RE DELICIOUS! See more of our farm fresh Christmas Gifts and Fruit-of-the-Month Clubs in honest-to-gosh full color. Just send off this coupon right away.
Harry and David®
Dept. 525-A Medford, Oregon 97501
PLEASE SEND FREE CATALOGS TO
NAME_____
STREET_____
CITY_____
STATE_____ ZIP_____
©1982, Harry and David

The pelican here is black and white and huge and tame enough to paddle over to the dock and look at you enquiringly when you're feeding scraps to the fish. This fellow is *Pelecanus conspicillatus*, and when he comes in for a landing, feet splayed out to hit the water, he reminds me of a new pilot in a float plane.

"New" because this big, rather comical bird sometimes makes ludicrous mistakes in elementary flying. Either through carelessness or because of overconfidence a pelican sometimes lands downwind—and is apt to turn a somersault in a most undignified way when he touches the water.

Both at early morning and early evening there are strange, rasping, high-pitched calls overhead, and a small flock of Crimson Rosellas (*Platycercus elegans*) hurries over the rooftop on their way from one clump of trees on the riverbank to another on the hillside. The sun is always low enough to glint on their red bellies. I want to see them close up, but they move too fast.

Rosellas and parrots and cockatoos are often seen, but I haven't positively identified my own sightings of them. It's tantalizing to be so close to really beautiful birds that are so exotic to Americans. Perhaps it's especially tantalizing because they really are old stuff to the Australians.

"You mean you're interested in seeing a King Parrot?" someone asks. "*Why*, for heaven's sake? They're all over the place."

And I suppose they are—but never all over the place where I am.

Then there are kites (one, the Brahminy, with a white head, startlingly like a small Bald Eagle), cormorants, kestrels. There are tiny honeyeaters in the garden and White or Straw-necked Ibises on the mudbanks. And on the golf course were two Blue-winged Kookaburras (*Dacelo leachii*) whose cackling laughter sometimes wakes me just before dawn. The kookaburra has, along with the kangaroo and koala, long been used as an Australian symbol.

Queensland is Australia's enormous northeastern state, stretching from Brisbane up to the Cape York Peninsula, the Great Barrier Reef running along beside the northern part of its coastline. This coast has occasional inlets where the endless beaches are broken by the outlet of some stream. These rivers tend to parallel the coast, for just inland the land rises to

WASHINGTON, D.C.

A Renaissance of Graciousness

A luxury hotel in the great European tradition. Elegant, quiet, unruffled—never a convention.

THE MADISON
Washington's Correct Address
15th & M Streets, Northwest
Washington, D.C. 20005
Phone (Toll-free) 800-424-8577
or see your travel agent
Marshall B. Coyne, Proprietor
Sales Office: 202-862-1735

Solid marble—the gourmet choice!

Smooth, cool, solid marble—dough won't stick to it, grease and moisture won't penetrate! Rolling pin is 18" long, has hardwood handles and real weight—pie crusts are a snap to make. Oblong serving board is 9x11x¾", beautifully polished and footed; ours alone. True gourmet investments, they'll grace your kitchen for decades to come!

Send me____#5424 Rolling Pins @ $15.98 ea.
Send me____#6645 Oblong Servers @ $9.98 ea.
Send me____#6690 Both @ $24.98 per set.
Add $1.95 shipping, tax in NY. Total $ _____

Name Apt.
Address
City State Zip

MasterCard/Visa: send card no., exp. date.
Charge by phone—914-576-6300

Lillian Vernon® Dept. SRT4
510 S. Fulton Ave., Mount Vernon, NY 10550

Photograph by Marie Cosindas

Those special days, those magic hours, they mean the world to me.
And so I'll show you how I care with this from FTD.®

I want it to express my joy, my hopes, my happiness.
And FTD knows just the way to help me say it best.

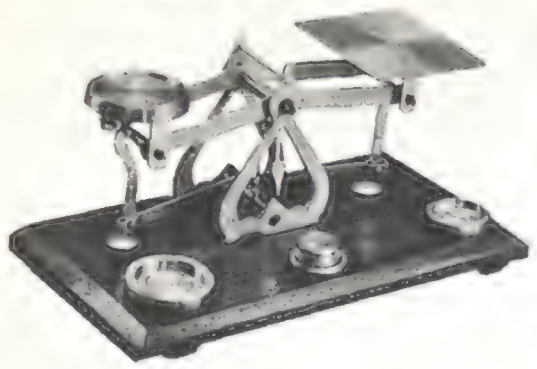
And even though we're far apart, these feelings we can share.
Because when it comes from FTD, it comes with special care.

FLORISTS' TRANSWORLD DELIVERY
FTD
SINCE 1910
®

®Registered trademark of Florists' Transworld Delivery Association.
FTD is a cooperatively owned floral wire and membership service.

©1982 Florists' Transworld Delivery Association.

"Authentic down to the last detail (and yes, it really works!)."



This replica of an English letter scale is crafted of brass and oak, just like the 1860 original. 7x3⅞x3½" high, comes with four tested brass weights. Get 120-p. catalog showing many European exclusives free with order. Send $____check/m.o. for____scales @ $29.98 ea. plus $1.50 shipping, tax in NY.

Print name 9319

Address Apt.

City State Zip

Charge it! Give MasterCard, Visa or American Express no., exp. date

Charge by phone: 914-699-1420

Lillian Vernon® Dept. SRT3

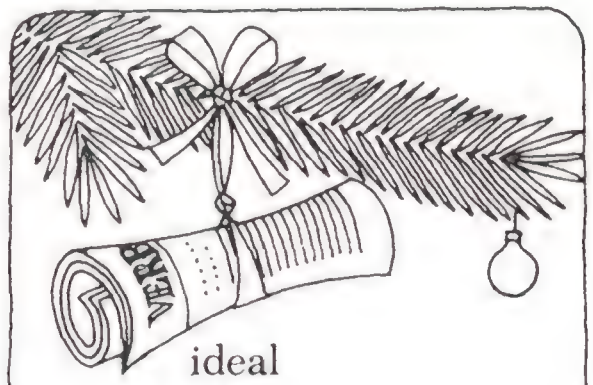
510 S. Fulton Ave., Mt. Vernon, NY 10550

THE SOURCE.

The 1983 Woodcraft® Catalog & Supplement

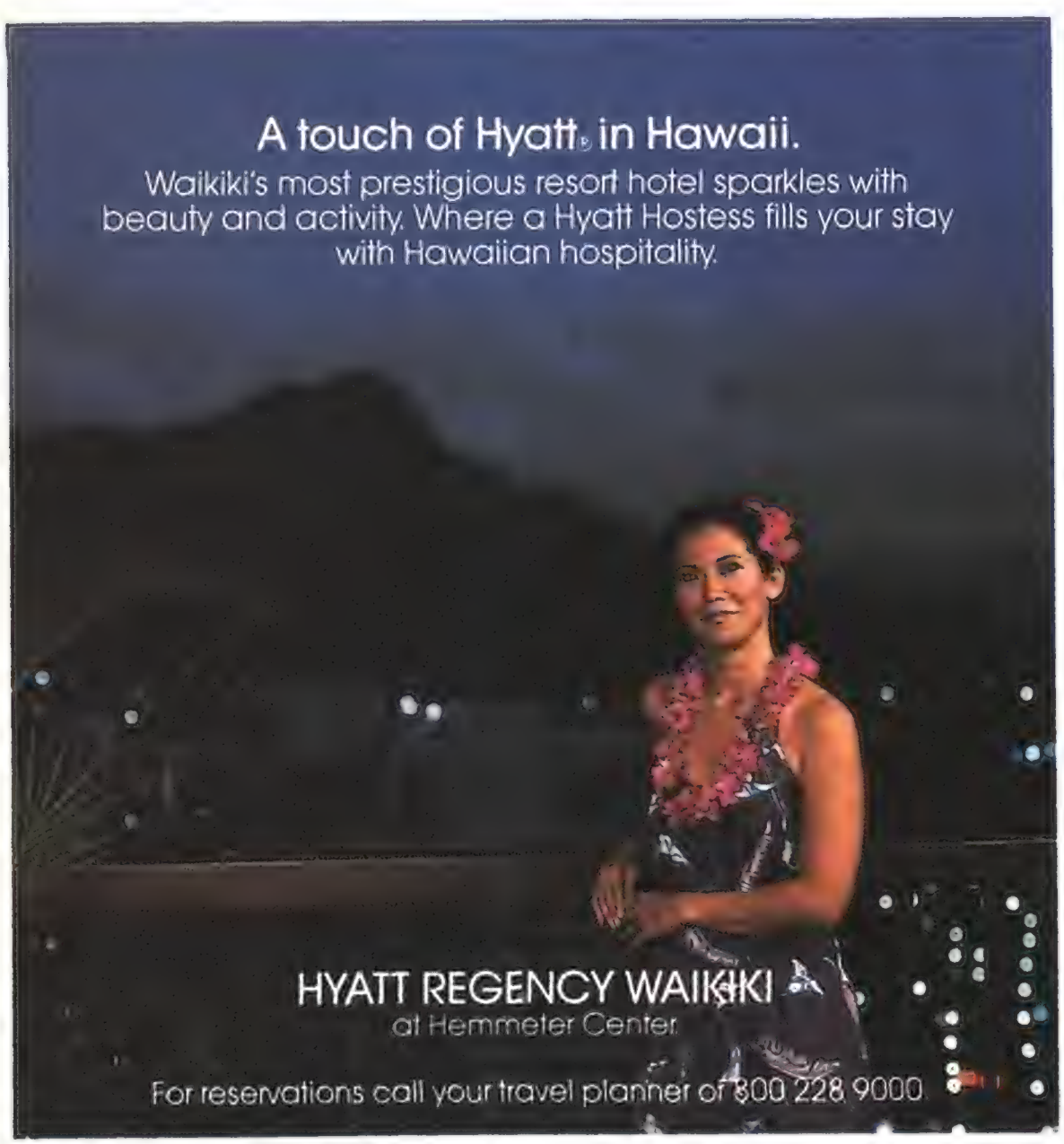
Imitated but never equaled. For 19 years our catalogs have brought the finest tools in the world to American carvers, cabinetmakers, wood turners, and other discriminating craftsmen. Fully illustrated with hundreds of new, useful and decorative items for home and shop. Color, 128 pages, perfect bound. $2.50 for two-year subscription (including supplements). Send check or money order, with return address, to:

WOODCRAFT®
41 Atlantic Avenue, Box 4000
Dept. S102 • Woburn, MA 01888



ideal
for
wordlovers

VERBATIM ESSEX, CT 06426 U.S.A. $7.50 a year
The Language Quarterly


A touch of Hyatt® in Hawaii.
Waikiki's most prestigious resort hotel sparkles with beauty and activity. Where a Hyatt Hostess fills your stay with Hawaiian hospitality.
HYATT REGENCY WAIKIKI
at Hemmeter Center
For reservations call your travel planner or 800 228 9000

another barrier, this time of geologically ancient hills and mountains, a few of which are cloaked by some of the world's only remaining patches of true rain forest. Rains come heavily in "the wet"—generally a couple of summer months like February and March, depending on how far north you are. Winter, when we were there, is beautiful. In southern Queensland it means cool nights and bright days.

Many of those inlets have become small (and expensive) resort villages, and no wonder. The money flows much faster from tourists than from crops of bananas, papaws, citrus fruits and vegetables that grow on the coastal plain, though it may never rival the basic state income from cattle and sugarcane, rum and minerals. Long stretches of beach are stippled with high-rise apartments and condominiums offering escape for the millions who toil in Sydney and Melbourne. These are the eastern cities that look toward Queensland as vacationland. But to a foreigner, Sydney and Melbourne are themselves fascinating, rich with restaurants, bright with flowers, alluring with shops.

I had not realized how cosmopolitan they have become. We stopped in Sydney before coming up, and at one point I found myself reading a newspaper in the hotel lobby, waiting for my wife to return from shopping. I couldn't help noticing the clothing, faces, accents, languages and other evidences of all the nationalities that moved around me. There were Germans and Japanese, Chinese in their gray suits, volatile Italians and Greeks. There were British and Americans and Canadians (whom you can tell by the way they say "out"). And there were several unidentified Central Europeans. And that doesn't count Australians and New Zealanders (whose accents are quite distinguishable from each other once you get to know them).

This was in a hotel, obviously a meeting ground. But even out on Sydney's streets we found that only about two out of three groups of pedestrians, say 60 percent of everyone on the sidewalk, spoke English, or more properly, Australian.

The post-World War II opening of the country to the "displaced persons" of Europe started Australia on its transition to a melting-pot nation. Today, judging from the visa requirements, it's not easy to settle here. It reminds me of Oregon—

Introducing the Bache Command Account.™ For the smart investor with $20,000 or more in cash and securities who believes a moment should never go by without making money.

All your funds are working all the time. For starters, the Command Account automatically directs the uninvested money in your account—including dividends—into a high-yield money market fund. Or, if you prefer, a tax-free or U.S. Government securities fund.

All your funds are available all the time. Through checks and a Visa card you can immediately withdraw cash or charge purchases anytime. And there is no minimum withdrawal (except in Colorado).

Instant Credit. Opening a Bache Command Account opens the way to a personal credit reserve. The loan value of your securities automatically creates credit that is yours for the taking.

Instant Organization. Each month Command Account clients receive a single, simple statement that shows all securities and money market fund transactions as well as every check and Visa charge.

Command Exclusives. A unique feature on your checks allows you to indicate tax-deductible expenses which are categorized on a special year-end statement.

The Command Account also entitles you to: a monthly investment newsletter, travelers checks, a price comparison and buying service, and special protection beyond normal SIPC coverage—for a total coverage of up to $10 million—underwritten by a subsidiary of The Prudential Insurance Company of America.

To learn more call or send in the coupon below.

How to make Smart Money more intelligent.

Bache
A Prudential Company

09 SMT-A-C

Bache Service Center
Box 5002, Clifton, N.J. 07015
Call toll-free: **800-526-7854,**
from New Jersey, call **800-522-4182**
(In Alaska & Hawaii, call the Bache office nearest you.)

I would like to know how to make Smart Money more intelligent. Please send me the free brochure and prospectus containing more complete information, including all sales charges and expenses. I will read them carefully before I invest or send money.

NAME

ADDRESS

CITY STATE ZIP

HOME PHONE BUSINESS PHONE

BACHE CLIENTS PLEASE GIVE NAME AND OFFICE OF ACCOUNT EXECUTIVE

Bache Command Account™

© Copyright 1982 Bache • Member SIPC

you get a great welcome if you come for a visit, but there is an impression (see SMITHSONIAN, September, 1970) that you might be looked upon askance if you moved in for good. Anyway, the grand pastiche of nationalities that make up Australia has added a special zest to the nation. I had a long conversation about diet with a Greek taxi driver who told me his grandfather drank water with a clove of garlic in it every day and lived to be 113, only dying then because he was hit by a bus. It's a good city that produces taxi drivers like that.

There are lots of things wrong with Australia, even with Noosa Heads, I suppose, although these latter are not very evident. But there is one other big "upper" that must be mentioned. Flying high over the Australian coast, not only in Queensland's airspace but even on the way in to mighty Sydney with its red roofs sprawling around its matchless harbor, an American notices the scarcity of smog. Approaching that coast recently in early daylight, the plane's captain told us that we were 100 miles out and starting our letdown. And from my window, as I peered forward, I could see a faint white line on the horizon. It was surf, crashing on those distant beaches, and this view of it came to me courtesy of clean air.

In contrast, I have often approached Los Angeles at the same high altitude and first glimpsed California in the form of a brown smear, blotting out the sparkling Pacific. The plane lets down into it through swirling skeins of brown that are roiled by the wing tips, and then through a solid bank of the same stuff, thick and dark. Los Angeles appears at last, murkily, as though seen at the bottom of a gravy bowl.

This is a sad and sobering experience for returning Americans. And perhaps it's a lesson for visiting Australians who may be adream with visions of emulating Californian growth, with high rentals and fine highways, all the better to get the big spenders to Eden.

I must close now. Some neighbors have just arrived, and it's time to get some glasses out, and to move out on the patio for the sunset, an emotionally beautiful half hour to be celebrated by the tinkle of ice. We must speak of trivial things, and laugh, and perhaps plan a little golf tomorrow, out among the kangaroos.

Edwards Park

SMITHSONIAN
MEMBERSHIP-SUBSCRIPTION DATA CENTER
P.O. BOX 2955 BOULDER, COLORADO 80322 TELEPHONE (303) 493-1037

In order to:

- Change your address
- Inquire about . . .
  The status of your membership-subscription
  Dues payments
  Gifts
- Report missing issues or membership cards
- Correspond about related matters

Please write to our computer data center where all these records are maintained and processed.

FREE AIRFARE TO OR FROM THE QE2!

ONLY THE QE2 SHOWS YOU SO MUCH PACIFIC AND ORIENT IN AS LITTLE AS 2 WEEKS.

Part palace, part playground, the Queen of ships has the pick of Pacific and Orient ports this winter. With the style and speed of the last of the great superliners, she outsails other ships, to offer you more time in port, including many overnight stays.

You don't just sail it. You live it. Your unique environment is quite simply the greatest ship in the world: 963 feet of modern luxury, 13 stories of nonstop excitement, an acre of open deck.

With celebrity passengers, international entertainers and the largest social and service staffs afloat, the Queen's ambience is legendary: lavish staterooms, four top restaurants, a 20,000-bottle wine cellar, a glamorous casino, an intimate disco and five lively nightspots.

The "Golden Door" keeps you ship-shape. Experts from California's famed "Golden Door" spa will be on board with a special fitness program. You'll enjoy yoga and aerobic dance, a gym and jogging deck, saunas, jacuzzis and swimming pools, a masseur and a masseuse—even a Parcours.

QE2 Life Enrichment presents renowned authorities to counsel you on everything from health and well-being to fashion and finance.

Fly free on your dream vacation.
The winter vacation of your dreams will never be a bigger bargain than right now—with free airfare via Pan Am to or from your hometown, on a wide range of cruise alternatives.

You can combine one cruise with another. Choose to begin or end your vacation in New York or Florida with a Trans-Canal cruise. Or take a unique Cunard tour, which includes your cruise, land and air arrangements.

L.A. to Sydney (Jan. 31, 22 days): San Francisco, Tahiti (Papeete), Moorea, Cook Islands (Rarotonga), Auckland, Wellington; from $4,360, including free airfare back to your home.

L.A. to Singapore (35 days): The above ports, plus Brisbane, Great Barrier Reef/Whitsunday Islands, Port Moresby, Bali; from $7,370, including free airfare back to your home.

L.A. to Hong Kong (44 days): All the above ports, Bangkok (Pattaya) and 3 nights in Hong Kong, plus optional tours to the People's Republic of China; from $9,455, including free airfare back to your home.

Singapore to L.A. (Mar. 7, 26 days): Bangkok (Pattaya), Hong Kong, Qingdao (China), Kobe, Yokohama, Honolulu, Kona (Hawaii); from $5,750, including free airfare from your home to Singapore.

Hong Kong to L.A. (Mar. 16, 17 days): Qingdao, Kobe, Yokohama, Honolulu, Kona; from $3,665, including free airfare from your home to Hong Kong.

Trans-Canal or transatlantic—with free airfare!

N.Y. to L.A. (Jan. 17): Port Everglades, Curacao, Cartagena, Cristobal, transit Panama Canal, Balboa, Acapulco; 14 days from N.Y., from $2,490; 12 days from Florida, from $2,340. Free airfare.*

L.A. to N.Y. (Apr. 2): Acapulco, Balboa, transit Panama Canal, Cristobal, Caracas (La Guaira), St. Thomas, Port Everglades; 12 days to Florida, from $2,340; 14 days to N.Y., from $2,490. Free airfare.*

L.A. to England (Apr. 2, 19 days): As above, with 5 glorious days and nights on the Atlantic and a free flight home to major gateways; from $3,240.

All rates are per person, double occupancy and subject to availability.
Free air tickets provided by Cunard.
*Maximum air allowance $300.

PAN AM.

British Registry

CUNARD

For a free QE2 vacation planner—with facts on free airfare—see your travel agent or contact Vaughn Rickard, Cunard, 555 Fifth Ave., New York, N.Y. 10017 (212) 661-7777.

QUEEN ELIZABETH 2
FOR ONCE IN YOUR LIFE, LIVE.

Name

Street

City State Zip

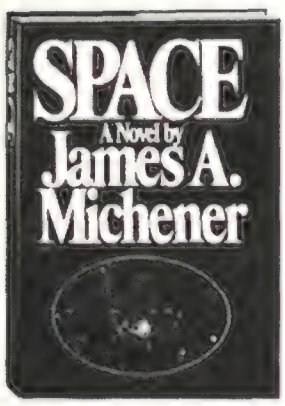
Travel Agent

E172742Q16

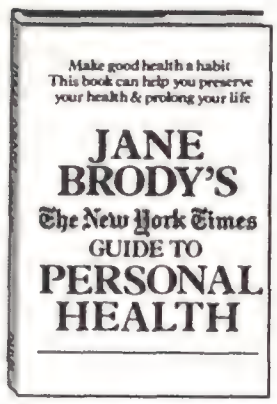
Either.

Choose any 4 books below for two dollars as your introduction to membership in the Book-of-the-Month Club.

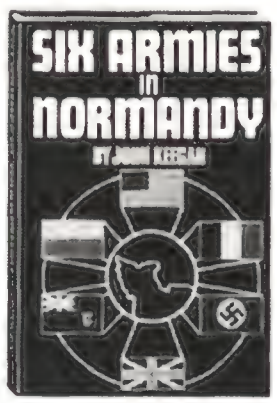
You simply agree to buy 4 books within the next two years.



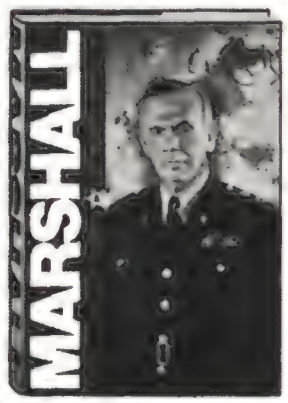
068 Pub price $17.95


Make good health a habit
This book can help you preserve your health & prolong your life
JANE BRODY'S
The New York Times
GUIDE TO
PERSONAL HEALTH

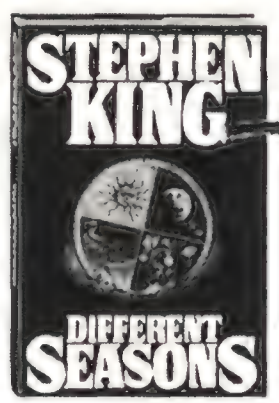
156 Pub price $19.95



741 Pub price $17.95

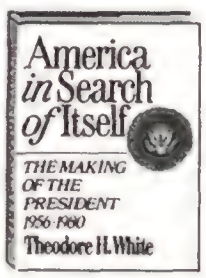


802 Pub price $18

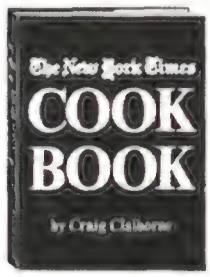


766 Pub price $16.95

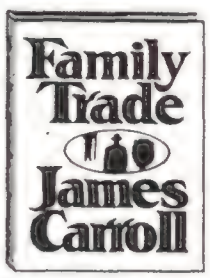
720 Pub Price $17.95



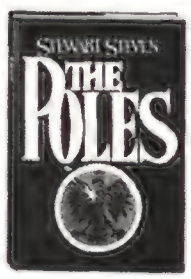
445 Pub price $15.95



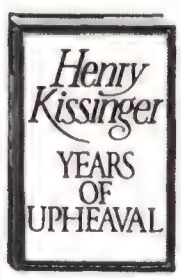
244 Pub price $16.95



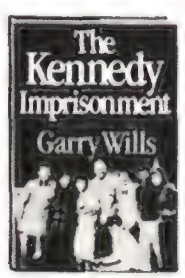
072 Pub price $14.95



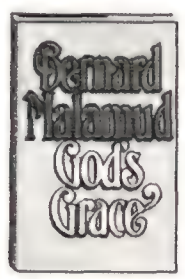
804 Pub price $15.95



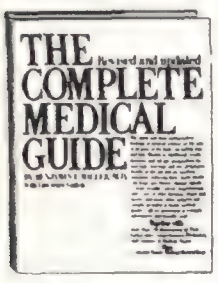
089 Pub price $24.95



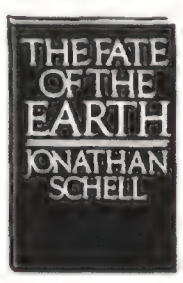
559 Pub price $14.95



801 Pub price $18.95



722 Pub price $19.95

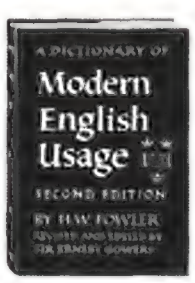


444 Pub price $11.95

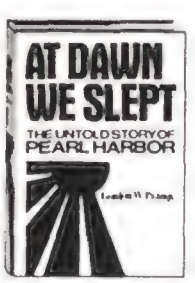
667 Pub price $14.95
(Softcover)

388 Pub price $13.95

267 Pub price $13.95



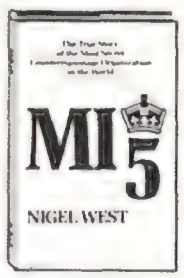
565 Pub price $15



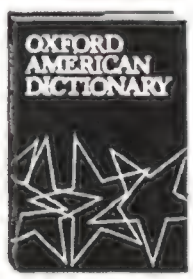
046 Pub price $22.95

526 Pub price $22.95

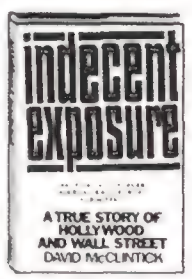
023 Pub price $13.95



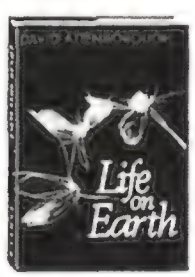
803 Pub price $16.95



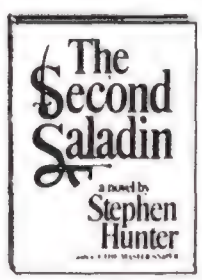
624 Pub price $14.95



806 Pub price $17.50

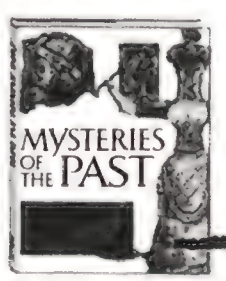


439 Pub price $22.50



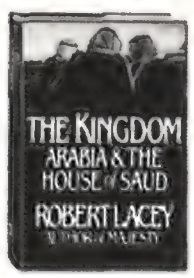
442 Pub price $14.50

786 Pub price $25



740 Pub price $34.95

271 Pub price $16.95

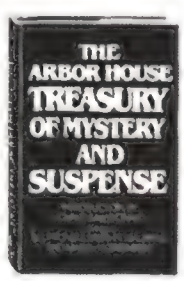


372 Pub price $19.95

800 Pub price $13.95

781 Pub price $14.95

242 Pub price $19.95



256 Pub price $20.95

Benefits of Membership

Membership in the Book-of-the-Month Club begins with your choice of either 4 of today's best books for $2 or one of the extraordinary works offered here. Because our prices are generally lower than the publisher's price, you will save on works such as these throughout your membership. In fact, the longer you remain a member, the greater your savings can be. Our Book-Dividend® plan, for which you become eligible after a brief trial enrollment, offers savings from 50% to 75% off the publisher's price on art books, reference works, classics, books on cooking and crafts, literary sets and other contemporary works of enduring value. Nevertheless, all Book-of-the-Month Club books are equal in quality to the publishers' originals; they are not condensed versions or cheaply made reprints.

• As a member you will receive the *Book-of-the-Month Club News*® 15 times a year (about every 3½ weeks). Every issue reviews a Selection and 150 other books that we call Alternates, which are carefully chosen by our editors.

• If you want the Selection, do nothing. It will be shipped to you automatically. If you want one or more Alternates—or no book at all—indicate your decision on the Reply Form and return it by the specified date.

• *Return Privilege*: If the *News* is delayed and you receive the Selection without having had 10 days to notify us, you may return it for credit at our expense.

• *Cancellations*: Membership may be discontinued, either by you or by the Club, at any time after you have bought 4 additional books.

• Join today. With savings and choices like these, no wonder Book-of-the-Month Club is America's Bookstore®

Or.

Choose one of the 5 valuable sets below as your introduction to membership in the Book-of-the-Month Club.

You simply agree to buy 4 books within the next two years.

The Compact Edition of The Oxford English Dictionary

for **$24.95** (Pub price $150)

The "most complete, most scholarly dictionary of the English language"—*The Christian Science Monitor.* Through photo-reduction, the original 13-volume set has been reproduced in this two-volume *Compact Edition.* Magnifying glass included.

The Story of Civilization by Will and Ariel Durant

for **$29.95** (Pub prices total $335.45)

For almost half a century Will and Ariel Durant traced the continuity of world history to show the foundations of society today. The Durants' 11-volume illustrated masterwork is history come alive in all its dimensions. The enormous scope of the work covers ancient and recent civilization, including Oriental as well as Western history. A Book-of-the-Month Club exclusive for close to 50 years, it is both a reference work of undisputed authority and a lively portrait of the rulers and leaders who have shaped the course of human events.

The Encyclopedia of Philosophy

for **$24.95** (Pub price $175)

The most comprehensive encyclopedia of philosophy ever published, this set traces ancient, medieval, modern, Eastern and Western thought. An essential and rewarding reference source for home libraries.

Great American Songwriters

for **$14.95** (Nonmember's prices total $74.85)

The best of American musical theater and popular music in one unique collection. The genius of Irving Berlin, Hoagy Carmichael and Johnny Mercer, Alan Jay Lerner, Sammy Cahn. In ten records, seven cassettes or seven 8-tracks.

The Decline and Fall of the Roman Empire by Edward Gibbon. Edited by J. B. Bury

for **$24.95,** 7 Vols. (Pub price $300)

The definitive Bury edition of the most acclaimed history of all. Illustrated 7-volume set, newly available on long-lasting, acid-free paper, quarter-bound in leather.

Book-of-the-Month Club, Inc., Camp Hill, Pennsylvania 17012 A454-10

Please enroll me as a member of Book-of-the Month Club and send me *either* the four books I've listed in the "Either" boxes at right, billing me $2, plus shipping and handling charges, *or* the one set I've checked in the "Or" column, billing me for the appropriate amount, plus shipping and handling charges. In either case, I agree to buy four additional books from the Club over the next two years. A shipping and handling charge is added to each shipment.

Mr.
Mrs.
Miss (Please print plainly)

Address Apt

City

State Zip

Prices shown are U.S. prices. Outside the U.S., prices are generally higher.

BOOK-OF-THE-MONTH CLUB®
America's Bookstore since 1926.

Either.
Indicate by number the four books you want

2-04

Or.
Check one box only

- 912. Compact OED **$24.95**
- 913. The Story of Civ. **$29.95**
- 917. Ency. of Philosophy **$24.95**
- 948. Great American Songwriters (10 Records) **$14.95**
- 949. Great American Songwriters (7 8-Track Tapes) **$14.95**
- 950. Great American Songwriters (7 Cassettes) **$14.95**
- 951. Decline and Fall of the Roman Empire **$24.95**

2-64

NOW A DISTINCTIVE
GIFT IS EVEN FINER.

CROSS®
SINCE 1846

Timeless Cross excellence in the Selectip Pen.™
In your choice of medium, fine and new extra fine
porous tips. Suggested prices from $16.50.
Now the finest name in writing is even finer.

Phenomena, comment and notes

A quarter century after Sputnik, space flight is both a threat and a promise. The latter could eliminate the former

Twenty-five years ago this month, humanity "slipped the surly bonds of Earth" and turned the daydreams of a hundred generations into reality. When Sputnik startled the world with its beep-beep-beep from orbit in space (see p. 148), mankind made the first tentative move beyond the biosphere, beyond the last wisps of atmosphere. Like some ancient sea creature, we poked our nose out into a new and hostile environment.

We climbed out onto that strange shore just 12 years later, when human beings walked around on the moon, drilling holes and collecting rocks. I was sure that we would just naturally continue on to Mars, to the moons of Jupiter, and right out of the Solar System to the stars. Not only were my childhood dreams coming true, but my growing belief that the human mind could accomplish almost anything was being confirmed with a flourish.

As a boy of 12 or so, trudging home from the day's adventures, I had thought automobiles miraculous. How unbounded one would be if all one had to do to get from place to place was sit on a comfortable seat and exert trifling pressure on a pedal. I hung around the local flying club enough to be taken for rides, and never tired of seeing the ground drop away. In the evening I would stare at the full moon rising, feeling it so close that I ached to go there. Through six- and eight-inch telescopes I saw the disks and even markings of those steadily shining "stars"

NORMAN ROCKWELL'S
Stockbridge At Christmas

From the museum which exhibits Norman Rockwell's personal collection of paintings comes this heartwarming portrait of his own home town at Christmastime. This "museum quality" print captures the joyous holiday spirit of small town America as only Norman Rockwell could.

Order today for only $14 postpaid. Send $1 for full color catalog of Norman Rockwell books and prints featuring exclusive photographs of Rockwell's Stockbridge Studio.

The Norman Rockwell Museum
At The Old Corner House© Dept. S 10
Stockbridge, MA 01262

The Pig Shirt™

What's a fat pink pig doing on a classic polo shirt? Causing alligator tears, for one thing. 100% soft combed cotton, banded sleeves and extra long tennis tail for superlative fit. Piggy pink, navy or white. Men's S, M, L, XL. Women's S, M, L. $26 ppd. $1 for catalog.

☐ Chk ☐ MC/VISA **Hog Wild!®**
Faneuil Hall Market L52, Boston, MA 02109 · (617) 523-PIGS

SAVE 25% AND MORE
ON LENOX, ROYAL DOULTON, MINTON & NORITAKE
FREE CATALOGUE

American Express
MasterCard & Visa
Are Honored

SMYTH
Call Toll Free
800-638-3333

except in Maryland (301) 252-6666
or write The Albert S. Smyth Company,
Department S102
29 Greenmeadow Drive
Timonium, Maryland 21093
for a free catalogue and price list.

Professional achievements are often born of a natural desire to reach out beyond professional traditions. But reaching out, even in a professionally responsible manner, can create new and unknown liability exposures. Fear of these potentially career-damaging exposures too often results in inaction, rather than achievement.

The CNA Insurance Companies recognize the stifling effect these fears can have on professional performance. For more than a quarter-century, we've been providing liability insurance which can encourage professional achievement by easing those fears.

By seeking close association involvement in every aspect of the program, CNA professional liability specialists are better able to tailor coverages to both current and changing needs. Another part of this interchange is CNA's sharing of loss data and loss expenses with associations to give members a clear understanding of their premium base.

Learn how CNA's professional liability insurance can encourage you and the members of your professional group to reach out to new achievements. Ask your independent insurance agent or your association executive to contact Vice President, Professional Liability, CNA, CNA Plaza, Chicago, IL 60685.

"WHAT WOULD LIFE BE IF WE HAD NO COURAGE TO ATTEMPT ANYTHING?"

Vincent VanGogh

CNA Professional Liability Insurance protects professional group members including ▫ Doctors ▫ Attorneys ▫ Architects ▫ Engineers Accountants ▫ Corporate Directors and Officers ▫ School Boards ▫ Hospitals ▫ Medical Clinics ▫ Publishers ▫ Broadcasters

INSURANCE FROM CNA

The perfect gift: This handsome appointment book features 58 magnificent photographic images meticulously reproduced in breath-taking color.

$9.50 each. Buy three—get one free!

Stephenson Inc. 703 642-9000
5731 General Washington Dr.
Alexandria, VA 22312

Postage and handling: Single copy, $1.85; additional copies, $.50 each; units of four, $2.85; 50 or more, call for special pricing and mailing rates.

Please send me _____ copies of your desk calendar.
My check/money order is enclosed $ _____
Please bill my ☐ Visa ☐ MasterCard

Acct. # _____ Expires _____

Signature _____
(Required for credit card only)

Name _____

Address _____

City _____

State _____ Zip _____

I knew to be planets, other worlds. A boy, still able to get from place to place on his own only by walking with the same gait laid down in stone 3.5 million years ago near Laetoli (SMITHSONIAN, June 1980), dreamed of space travel. Journeys accomplished by the power of the mind rather than the strength of the legs.

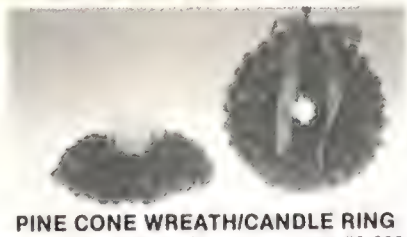
Sputnik made clear that our minds had the power, that we could go into space any time we made up our minds to. But life is more complicated than a boy's dreams. Governments spent billions on rockets not only for space travel but for intercontinental artillery, "delivery systems" for nuclear weapons. Of the six nations today that can launch payloads into space, most also have nuclear weapons. Now the United States and the Soviet Union are spending hundreds of millions to develop satellite killers and "death-ray" weapons, while the budgets for planetary exploration dwindle.

Yet for the last decade or so, space technology has also been a force for peace. Some surveillance satellites, reportedly able to read the numbers on a license plate, gave the superpowers enough confidence that they can know what the other side is doing for them to sign agreements limiting the numbers of strategic weapons. Any future reductions will probably depend on those eyes in the sky.

In 1978 at the United Nations, the French urged an International Satellite Monitoring Agency, a network to be run by the U.N. for peacekeeping and treaty monitoring. Such a system would cost more than the entire current U.N. budget, but proponents point out that by verifying regional arms-control efforts alone, it would more than pay for itself in reduced military spending.

Last August in Vienna, the United Nations convened its first full-dress conference on the future of space since 1968. Not at all coincidentally, the Worldwatch Institute in Washington devoted its 50th paper to "Space: The High Frontier in Perspective." (The Institute, established to help gather and disseminate information about global issues—the environment, energy, space—publishes papers on these and related topics.) And while the author, staff member Daniel Deudney, dismisses my boyhood dreams of space travel as something for the distant future, he argues that surveillance satellites could serve as the keystone for the abolition of

SPECIAL VALUE



PINE CONE WREATH/CANDLE RING
6" Outside Diameter $11.95 Ppd. Item #2-626

Intricately hand-made Holiday Special with 8" red silk gros grain hanger ribbon (remove for candle ring) Ideal for home/hostess gift giving. Votive cup not included, gift boxed.

Send $1.00 for 14 pg. **full color** Xmas catalog. All different, exotic items. Refund against 1st purchase. FOR ALL THAT'S NEW, UNUSUAL!! All items shipped Same Day Received, **all** PPd

Send to: PAM Attn: Dept. SM
1906 Jackson St. #14, Oakland, Ca 94612

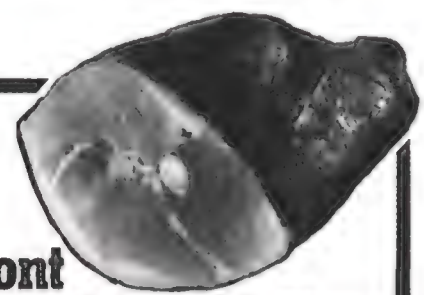
Luxury Lambskin Gifts

Send for your free color catalog today.

Dozens of unusual, quality gifts, just in time for the holidays, yours from SKINNY's of Down Under. Men's, women's and children's coats, hats, mittens and slippers—plus shearling car seat covers, decorator throw rugs, toys and infant slumber rugs. All hand crafted from luxurious genuine New Zealand and Australian lamb's fur and sueded lambskin. For free catalog and a 10% discount on this decorator throw rug call:

Toll Free 1-800-426-4626 or
Collect In WA, AK and HI,
(206) 575-9128

VISA/MasterCard Accepted
50 Years of guaranteed customer satisfaction
SKINNY'S of Down Under
P.O. Box 88067, Dept.SM-10 Seattle, WA 98188



Treat yourself to our famous
Vermont Corncob Smoked Ham
at special introductory savings

. . . and we'll treat YOU to our Smoked Bacon and our Aged Cheddar FREE!

We smoke our Hams and Bacon over slow fires of corncob and maplewood, the way we've been doing it here in Vermont for over 100 years. The flavor is beyond compare — so much better than hickory smoked.

If you've never tried one, we'd like to send you a 6-lb. Cob-Smoked Ham (serves 6 to 8) at our one-to-a-customer Introductory Price of only $21.95 plus $3.00 postage and handling — **a $33.25 value; you save over $8.00.** Order now, and we'll ALSO include 12 oz. of our cob-smoked Bacon PLUS a half pound of our special Aged Cheddar — both FREE. Satisfaction guaranteed.

-----*HARRINGTON'S*-----

070A-2 Main St., Richmond, Vermont 05477

Send 6 lb. COB-SMOKED HALF HAM at special Introductory Price of only $21.95 plus $3 postage and handling. Include my FREE GIFT of smoked Bacon and Aged Cheddar. 7765

☐ **Payment enclosed ☐ Charge my ( ) MasterCard ( ) VISA ( ) American Express ( ) Diner's Club acct. (include card no. and exp. date). Offer expires Nov. 30, 1982.**

Name _____

Address _____

_____ **Zip** _____

Phone Orders: (802) 434-3411

The European Blue Tit

by Peter Barrett

The internationally renowned wildlife artist creates an original sculptured bell.

Intricate sculpture in fine, hand-painted porcelain . . . at the very attractive price of $60.

Hand-decorated with pure 24 karat gold.
Sculptured life-size / Hand-painted
Limited edition

'The European Blue Tit' reflects all the beauty of two great traditions. Combining the intricacy of a hand-painted porcelain sculpture . . . and the lilting magic of an exquisite bell . . . to capture that miracle of nature known as a songbird.

Artist *Peter Barrett* has won international acclaim for his work . . . from the time of his first exhibition in London's famed Royal Academy to his recent commissions from the Royal Society for the Protection of Birds. Now, in this extraordinary sculptured bell, he has re-created nature's own richness of detail.

Here, the splendid little songbird clings to a japonica branch that's aburst with red blossoms. The individual barbs of his blue and yellow feathers—even the tiny joints of each leg and foot—are portrayed with exacting precision. Each blossom is a wonder in itself, with every one of its delicate petals and stamens superbly captured. And the graceful bell of snow-white porcelain is embellished with *pure 24 karat gold.*

Both songbird and setting are sculptured *life size.* Each sculptured bell will be individually handcrafted and hand-painted under the supervision of Franklin Porcelain in Japan—home of many of the world's most gifted porcelain craftsmen.

'The European Blue Tit' is available only from Franklin Porcelain and will be issued in limited edition. A restriction of just *one* bell per person will be enforced, and the edition will be *permanently closed* at the end of this year. Then, the porcelain molds will be *broken.*

To endow your home with a work of singular beauty . . . and acquire a future heirloom for your family . . . you need only return the accompanying application. Please note the expiration date it bears—*December 31, 1982.* To be valid, it must be received with a postmark no later than December 31, 1982.

Shown smaller than actual size. The sculptured bell stands approximately 5 inches tall.

© 1982 FP

RESERVATION APPLICATION

The European Blue Tit

Valid only if postmarked by December 31, 1982.

Franklin Porcelain
Franklin Center, Pennsylvania 19091

Please accept my reservation for *'The European Blue Tit'* by Peter Barrett. This original sculptured bell will be handcrafted for me in the finest hand-painted porcelain.

I understand that I need send no money at this time. I will be billed in four equal monthly installments of $15.* plus $.75 for shipping and handling, with the first payment due before the work is sent to me. **Plus my state sales tax.*

Signature _____
ALL APPLICATIONS ARE SUBJECT TO ACCEPTANCE

Mr./Mrs./Miss _____
PLEASE PRINT CLEARLY

Address _____

City, State, Zip _____

Limit: One per person.

war: "Extending that capability and integrating it into arms-control agreements is the greatest foreseeable contribution space can make to human welfare."

The most important thing we have learned from space, he says, is that humanity's fate will be determined on Earth: ". . . for all our looking and probing of the universe, we have yet to find any place as habitable as the remotest, most forbidding parts of this planet. Space exploration has taught us just how rare and precious the Earth is."

Deudney would have us use the power of our minds in space not to travel to other worlds—yet—but to take care of the one we have: "earthkeeping," he calls it. Seeing our planet from space has given new urgency to the need for reforestation, population control and the protection of genetic diversity. And space technology will help:

"Humanity's greatest challenges now are averting war and stabilizing the physical basis of human life on Earth. Engineering triumphs in space will not help in these battles. But reversing the spread of weapons into space, making space a stronger pillar of international peace keeping, designing new institutions of global scientific cooperation, and ensuring a permanently habitable Earth would be to conquer humanity's real frontiers."

Deudney has some dreams of his own. He points out that the American shuttle and the Soviet Salyut space station are perfect complements and cry out for the kind of cooperation hinted at when astronaut met cosmonaut at the docking of an Apollo and a Soyuz in 1975. He would like to see an international satellite network. Third World countries could follow the cooperative lead of the European Space Agency to launch satellites.

Sputnik put us into space, a fourth dimension for war but also a new dimension for human understanding. One can certainly argue that the way we have handled this new technology during the past 25 years shows that we are not quite ready for new worlds. But it also has shown that we are learning how to take better care of our own.

At times I've felt cheated by the space

Space-age craft hover over futuristic urban center conceived by artist Robert McCall.

program. When the last few Apollo flights to the moon were canceled, it seemed a betrayal. More recent proposals to stop receiving transmissions from spacecraft already on their way to and beyond outer planets left me feeling diminished, like cutting a vacation short.

But there may be no better way to observe weather, measure deforestation, track icebergs or assess crop conditions. The more serious we get about earthkeeping, the more useful the extra dimension of space will be. The Worldwatch Institute's first paper was on the crisis caused by shrinking firewood supplies in developing countries. The latest addresses humanity's most remarkable technology, but is drawn from the same concerns.

The human mind can indeed accomplish almost anything. It can devise peace-keeping satellites and global monitors, and it can ensure a permanently habitable Earth. If it does accomplish these dreams, the planets and stars will still be there, and there will still be plenty of time to travel to them. If we ever get our own house in order, then we will be able to leave for visits to exotic places. Perhaps some descendant of mine, a hundred generations from now, will take the shuttle to some spaceport for a little trip. To the stars.

John P. Wiley jr.

Picture credits
Cover Eric Valli; 30 Robert Rattner; 46, 47 Robert McCall/Walt Disney Productions Inc.; 50-59 Eric Valli; 60, 61 Ang Norbu; 64 The Tower of London Armouries; 66-67 Ian Yeomans/Susan Griggs Agency Ltd.; 68 Crown Copyright; 69-70 The Tower of London Armouries; 71 Ian Yeomans; 71-72 The Tower of London Armouries; 73 Ian Yeomans; 76-84 Lawrence A. Wishner; 85 Robert Noonan; 88-97 Jeanne Moutoussamy-Ashe; 100-107 Hillel Burger; 110 Henry Groskinsky; 111 Arnold Newman; 112 Museum of Art, Rhode Island School of Design, Albert Pilavin Collection; 113-114 Whitney Museum of American Art; 115 National Museum of American Art; 117 Henry Groskinsky; 120-131 Brenda Losey; 132, 133 Chad Slattery/ After Image, Inc.; 134-143 Donald Perry; 144, 145 Michael Tropeo/Terra Museum of American Art; 147 New York Chamber of Commerce and Industry; 148 from *The National Air and Space Museum* by C. D. B. Bryan, Harry N. Abrams, Inc.; 148, 149 Wide World Photos; 149 *The New York Times*; 150-159 The National Air and Space Museum; 160 *The New York Times*; 162 Nat Farbman, *Life* © Time Inc. 1968; 166, 167 D. R. Miller; 169 Neal Smith; 172-176 John S. Dunning; 178 Wayne Lankinen/Bruce Coleman; 180-184 John S. Dunning; 184 (top) John H. Rappole; 186 Fred J. Alsop III/Bruce Coleman; 188 Neal Smith; 203 Caroline Thorington; 205 Freer Gallery of Art; 208 Mike Smollin.

12 YEAR OLD BLENDED SCOTCH WHISKY. 86.8 PROOF. BOTTLED IN SCOTLAND. IMPORTED BY SOMERSET IMPORTERS, LTD., N.Y. 1982

dimension

"Bell put reduced operating costs at our fingertips."

If you've got a business, the Bell System has a way for you to reduce operating costs. By installing a Dimension® PBX from Bell, you gain control over many features of your communications system.

You will be able to assign your own extension numbers, which means that an employee can change offices and keep the same number. Any member of your staff can transfer a call without involving your operator. Any call can be turned into a three-way conference call, with callers speaking from three different telephone numbers. Any employee can instruct the system to direct his or her calls to another telephone. Special rings distinguish outside calls from inside calls.

You can assign special features to specific phones. You can limit which phones have access to long distance calling. You can print out your own record of calls for individual phones.

But you won't be entirely alone. Bell will continue to check your system to identify problems before they develop. In many cases, repairs will be made remotely.

Turn your telephone system into a productivity resource. Call your Bell System Account Executive.

The knowledge business

By Christine de Cherisey *Photographs by Eric Valli*

Yaks keep up a thousand-year-old trade between Nepal and Tibet

Twice each year the caravans bring down salt, take back grain—an exchange essential for survival on both sides of the border

The packs are heavy, and Nar Bahadur, our young mountain porter, is falling behind. Although the evening is cool, I feel my back perspiring under my knapsack. Eric is faster and walks ahead. When we reach the end of the path, it is only a few steps more to Danene's house, and we cross his bamboo terrace to shoulder the front door open. We have come back to Nepal to spend another winter among the Tibetans of the Tsangpo upland valley and to join the caravans. (*Tsangpo* simply means "big river" in Tibetan and is what the local inhabitants call this one; it should not be confused with the Tsangpo River, a major stream that rises in Tibet and eventually becomes the Brahmaputra.) It is very unusual for the members of a Tibetan caravan to allow a foreigner to travel with them. But this is the fourth winter we have spent in this valley, and the people have become our friends.

Eric chanced upon the caravans during the winter of 1978-79. On his way to a distant village to observe a festival he had heard was going to take place, he saw a group of several dozen heavily loaded yaks being led by Chinese Tibetans. They had come straight from Tibet with salt to be exchanged for grain from the valley. Eric was amazed to discover that this thousand-year-old trading system still existed. With the military occupation of Tibet by the People's Republic of China in 1959, it was generally believed that these caravans had disappeared. Eric managed to become accepted by the members of the caravan and accompany the men partway back to Tibet when they had finished their trading.

As we walk into the house, Danene (p. 57) sees us and gets to his feet, and Ongmau, his wife, gives us a dazzling smile. We apologize for disturbing the couple at such a late hour, but Danene interrupts, "Don't worry about anything now. This is your home." To be received in this way by a family we have not seen for ten months is wonderful. We are touched by their welcome, and Danene's simple words are very meaningful. They express all the affection and trust that have developed between us over the course of many trips together across Nepalese lands.

The people of the Tsangpo very rarely come into contact with other cultures. Some of the Nepalese valleys are so poor and fragile in terms of ecology and cultural equilibrium that the government has decided to shield them from large-scale tourism to allow them to prepare for the realities of the 20th century gradually. They know that other ways of life exist, because they have had occasion to see kerosene lamps, Indian

Returning to Tibet, laden with grain and flour, yak train plods through a snowstorm at 16,000 feet.

Copyright 1982 by Christine de Cherisey

Old trading post as well as home, Piling is the first stop on the route from Tibet down into Nepal.

Phuntsok, Dolma and cat live at Piling, an isolated house five hours' walk from the Tibetan border.

cloth, and even bicycles and airplanes on their trips to the southern Nepalese market towns. But because of their poverty, their relative isolation (the nearest paved road is a 12-day walk along the Tsangpo) and their respect for tradition, they are influenced very little by the outside world.

People of old Tibetan stock, the inhabitants of the Tsangpo river valley have been in exile in Nepal for several hundred years. Their language, food, clothing and way of life are Tibetan. They make their living basically as farmers and trade for the essential items that complement what their land produces. Although they sometimes go south for rice, red peppers and occasionally butter, most of their trade still takes place under a barter system with the Tibetans living in China. Twice a year, in a journey that takes about ten days, the Chinese caravans lead their yaks across the Nepalese border to the Tsangpo upland valley, loaded with the salt, animal fat and wool they will exchange for grain. This trade is absolutely essential to the survival of the two peoples, which is why it is tolerated—on a very unofficial basis—by their governments. For the men of the Tsangpo, salt from Tibet is cheaper than salt from India, which they would have to transport themselves from the south. The Chinese Tibetans, basically herdsmen, would not be able to survive without grain from Nepal. Their high, arid plateaus yield only a few crops, such as barley and potatoes.

Christine de Cherisey has spent four winters in the valley she describes. She is the author of Tsangbou: Entre Népal et Tibet *(Hachette, 1981).*

Stylized map by Lama Karma Chirum shows path of caravans from Pibou (two houses at top) to Tibet.

I savor the warm, comforting *chang* Ongmau has served us; it is a sort of beer made from millet, barley or other grains. "I knew you were coming. I was waiting for you," Danene tells us. News travels fast in the valley. When I awake the next morning, the weather is cold; it is probably snowing in the mountains. Ongmau roasts some corn and offers me a handful. I accept it with a smile. While we eat, Eric and I discuss our plans with Danene. He says the caravans will arrive soon, in one week at the most. This news completely disrupts our plans. We had intended to spend a few days at Danene's house before leaving to join the caravans, but if they are expected to arrive sooner, it would be better to start off immediately. We will set up our home camp at Piling, a secluded house in the forest below the pass into Tibet.

Danene nods his head. "I'll go with you," he says. But that evening he suddenly looks worried, and asks what day of the week it is. This seems like a strange question in a land where all notion of time and dates is relative. Eric tells him it is Monday. "Then we cannot leave tomorrow," Danene says. "I must not leave my house on Tuesday because it is an evil day, and I will be bringing bad luck upon my house. We will have to wait until Wednesday." This is the first time we have heard of this interdict: each member of the family has one day a week, chosen by the lama, when he cannot risk leaving his abode without jeopardizing the well-being of the others. There is a silence. Danene senses we are upset and says, "But if we go now and sleep at Gabou's house, we will be leaving the house Monday and not Tuesday. The problem is solved!"

When we have buckled our knapsacks, the three of us take off to sleep at Gabou's house—a few yards away. The next day we start at dawn. It is going to be a rough trip: we will have to descend, cross the river Tsangpo, ascend the opposite slope, and travel to the foot of Pibou, the village where the trading is to take place. From there we will have a long hike.

It is night before the profile of a house comes into view on our left. At last we have reached Piling (opposite). Phuntsok and Dolma, the elderly couple who live in this isolated house (he is 71 years old, and she is 69), greet us enthusiastically. We give them the Chinese cups we bought in Katmandu. This is the kind of gift the Tibetans love and cannot get from China.

Phuntsok invites us to share a meal and offers us meat. Remembering a past experience involving some awful stomach pains, we refuse but manage to do so without insulting our host: "Our religion forbids us to eat meat for the next five days," Eric explains. Phuntsok nods sympathetically. We expect to be en route with the caravans before five days are up and are sure to miss this menu. The days go by, however, and there is no sign of the caravans.

Then one morning, while we are eating breakfast, Phuntsok comes in. "One more day!" he tells us mysteriously and slips out again. We wonder to what he could be referring. Perhaps the arrival of the yaks? But the next evening he comes to show us a strangely shaped pouch that exudes a disagreeable odor. "You can finally eat meat tonight!" he exclaims. "This choice morsel is from Tibet. I have been saving it for a month." The treat we are invited to share turns out to be *gyuma*—sheep intestine stuffed with fat, blood and flour. A tough test! Phuntsok has taken pity on us because of our five-day abstinence. The honor he is bestowing upon us is also a test of friendship. So I eat

Nepalese measures corn into Chinese Tibetan's bag to pay for red pants—at 40 bagfuls, a luxury item.

Getting ready for Tibet. Yaks are freed each night to graze; red tassels help to find them in the morning.

Heavy, unseasonable snowstorm bogs down caravan on its way to Tibet. Men stop to decide what to do next.

the "choice morsel," fighting the urge to be sick, and after the feast I steal off behind the house.

Two more days pass and still the caravans do not come. We take advantage of the long evenings to chat with Phuntsok. "Thirty-five years ago," he tells us, "the trading took place farther up, at the foot of the pass. It was called the *Bakang*, the great fair. The men of the caravans would come down from Tibet with their entire families and their herds and set up camp for two or three months. In those days, the men of the Tsangpo and even people from southern Nepal would come there to trade. It was a great gathering, with hundreds of people bartering salt and grain. At that time, Piling had five houses. Ours is the only one left, and when we are gone, there will be no one. Then there was a huge landslide, and the trails that linked the *Bakang* with the south collapsed. The Tibetans had to find a new trading center, so they went to Pibou, the highest village in the Tsangpo." Of course the introduction of salt into Nepal from India and the invasion of Tibet by China have had an impact on this commerce. Today the Chinese Tibetans no longer travel with their families, and their stay in Nepal lasts only a few days.

At last, one day when Eric has been gone overnight and I am carding wool with Dolma, the mountain comes alive with music. A concert of bells and whistling can be heard, accompanied by the slapping of slingshots. My heart begins to race, and I leap to my feet to see a procession of yaks and men. I count more than 60 yaks. Eric comes over to tell me his story. He had met the caravans the day before and joined them in leading the yaks to a camp upland from Piling. "It was a good reunion," he says. "I was a little bit apprehensive, but meeting them at the top of the pass and being able to give them those pictures I took two years ago made it easier. Well, this is it. We are at last among the caravans!" The men look at me with frank curiosity. I am the first Western woman they have ever seen, and have blonde hair and blue eyes to boot (they think blue eyes are a sign of blindness).

The stop in Piling is a short one, and when the caravan sets off for its next campsite, we go with it. The yaks carry heavy loads. Each one carries about 150 pounds distributed evenly between two sacks hanging from a wooden saddle.

We soon arrive at a stretch of relatively flat open land. This is the traditional campsite, the last one before we reach Pibou tomorrow. Eric has set his belongings on the ground and is already helping to unload the yaks. Five tents are pitched: two pieces of canvas stretched tight with stakes cover a circular wall that is

constructed with piles of sacks and other equipment. The men bring water, build a fire in the middle of the tent and prepare their meal. We are invited into Dawa Tshering's tent, where we will sleep that night. There is not much room, but everyone will huddle together.

The men sit in a circle. With tea boiling in the cauldron, they shoot questions at us: "What are you doing here? Is she your wife? Do you have any more photographs?" Tshetan acts as interpreter. We make jokes and the men laugh. Pasang, the cook, fills our bowls with tea and adds a pat of butter from his own provisions. Dawa opens his knapsack and offers us some ground roasted peas to mix with the tea. This ground pea flour is called *tsamdur*, but mixed with tea or broth, it is called *rentsam*. When it is eaten with milk or yogurt, however (this is how the Chinese Tibetan herdsmen prepare it in the summer months), it is referred to as *endoke*. I feverishly record this vocabulary in my notebook. In learning a new language, one becomes aware of the concerns of those who speak

When snow covers grass, yaks are fed broth of tea, flour and nettles. Ornery one has to be force-fed.

it. In Nepali there are at least three different words for rice: one to denote rice in the field, the second for rice in the granary, and the third for cooked rice.

When we arrive in Pibou the next day, children rush out to escort us, shouting with joy. The yaks are led down the narrow streets; they stop in groups of three or four and are immediately tied up. With the help of the men of Pibou, the members of the caravan unload their animals and pile their sacks in the houses of their village trading partners. The women serve their guests *chang*. The yaks bow their heads and plant their hooves firmly in the ground, waiting to be led back up toward the mountains. They become uncomfortable at altitudes of less than 14,000 feet, and once all the animals have been unburdened, some of the men from Pibou will take them to high pasture land.

Back in the village, the men sit cross-legged on the terraces and exchange the latest news. No one will be talking business today. Dawa tells the story of how he met us and proudly displays the photograph we gave him. Pasang examines it with interest—upside down, but that does not seem to matter.

After two days of rest in Pibou, where the other caravans will eventually arrive, the Chinese Tibetans set off for the villages down in the valley with samples of their merchandise in order to make business deals. Each man has his own trading partners with whom he has always dealt, and there is deep trust. At Danene's house, Lobsang reaches into his knapsack and takes out a pouchful of animal fat, a handful of salt and a piece of *nambu*—wool spun from yak or sheep hair and very tightly woven in narrow strips—which is used to

Mugging for camera, Chusang—a Chinese Tibetan—braids rope while waiting for caravan to start.

During storm, Pasang the cook serves tea. Others play dice, joke about how much they miss their women.

make Tibetan clothing. Danene slowly and carefully touches, sniffs and examines the goods, nodding his head all the while.

Salt is the main object of trade, and about 15 tons of it are brought down by the caravans each summer and winter. The men of the Tsangpo use it to prepare their meals and especially to feed their animals. The surplus is used as currency in commerce with the southern Nepalese villages and will be traded for rice. I ask Ngawang where this precious salt comes from, and he says to me: "From the Changsha salt mines in the north. The government sells it to us cheap, and it takes two months for a sheep caravan to carry it to Dikitchen, our village."

As soon as they have come to an agreement with their trading partners in each of the villages of the valley, the men of the caravans return to Pibou, where the villagers will meet them with the flour and make the exchanges. During the few days when the trading

Danene, the author's first host in Nepal, watches in snow as yaks are loaded for the return trip.

is actually going on, Pibou bustles with activity. Out on the terraces and in half-lighted rooms, flour and salt are measured in wooden *khekours*. Lobsang holds his sack open while Danene pours in the cups of flour, counting out loud. The rates are strictly established. Two measures of salt are worth five of flour. This year salt is expensive. Lobsang watches with a solemn expression as Danene fills the measuring cup with flour and levels the contents with the outside edge of his hand. It is not that he does not trust the other man; it is that he is watching a bit of life change hands under his very eyes.

Nearby, other men are measuring out *nambu* into lengths called *dhompas*. A *dhompa* is the distance between a man's two hands when he opens his arms as wide as he can. The men protest loudly when Eric tries to use his own two arms to measure some *nambu* he wishes to purchase. "Oh no! You're too big!" And it's true. Eric adds about six inches per *dhompa*.

Finally one morning it is time for us to leave. On the terrace the men of the caravan pile up their brown sacks bulging with flour, rice and corn and sew up the openings with large stitches, lay out the collars and bells, and examine the pack saddles. The yaks are led down by the herders, and they rush into the village, wreaking havoc in the narrow streets. Their few weeks of vacation in the mountains have made them somewhat wild. Clicking their tongues in the old familiar way, the men of the caravan approach their animals, saddle the yaks and hoist their cargo up (p. 54).

So, just a month after their arrival, the Chinese caravans are ready to set off again—one small group at a time. Dawa and Lobsang, the leaders of the Dikitchen caravan, have invited us to join them. The yaks begin slowly, decked out in their pompons and bells. Four animals lead, followed by one man, another four animals, and then another man. The procession makes its way across the village and begins to climb into the

Let loose during night while caravan is snowbound, strayed yaks are rounded up in morning to be fed.

hills. The men wave casually and shout a few words from a distance, and then proceed without a backward glance at the villagers, whom they will not see again for five months.

Once again we cross forests, but this time it is cold, and the sky is white. By the time we reach Piling, there are already seven to eight inches of snow on the ground. The caravan stops for a moment in the yard of the house. The snow is falling thick and fast, and the yaks are having trouble advancing, but the men button their jackets, pull up their collars and decide to continue.

Three hours after leaving Piling, we reach the camp-site and unload the yaks. The tents are pitched in the storm, and Eric and Pasang go out to gather wood. The men seem to be philosophical about this weather. But it is so bad that a foot and a half of snow must be cleared away before we set up the tent. As I fall asleep, I begin to think about the possibility of being snow-bound for days.

And in fact the next morning it is still snowing heavily. Dawa examines the sky and comes back into the tent frowning. Five boys are sent to find the yaks (above) and Pasang begins to cook a broth of tea and

This yak has given up. Left behind, it will be taken down to wait for next caravan to come up.

flour mixed with dry nettles. When I ask him if this is going to be our morning meal, he laughs and explains that when it snows the yaks cannot find uncovered grasslands and have to be fed. Each animal then receives its ration of the broth, but one stubbornly refuses to eat its share. Dawa shakes his head. "We'll have to force-feed it," he says. So Ngawang takes hold of the yak's head while Dawa pushes a horn filled with broth into its mouth (p. 55). The animal is recalcitrant and tries to get away; the men have to hold it still and pull on its tongue in order to force it to swallow.

We are all soaked to the bone when we get back inside the tent, and Pasang serves us several bowls of tea to warm us up. We stay in the tent all afternoon. The men seem untroubled, smoke cigarettes and keep themselves busy. Dawa, Tshetan and Chöphe play *parasho*, a dice game. Pasang rolls Nepalese tobacco (the very best, he says) in rectangles of Chinese newspaper and smokes one cigarette after another. Ngawang sews his cloth boot, and Norbu, who is spinning wool, suddenly turns to me and asks pointblank: "Is it true that the Russians have horns and tails?" I burst out laughing. The next day it is still snowing and the men begin to get nervous. After feeding their yaks, they come back inside the tent and sit around the hearth. Wordlessly, they hold out their bowls to Pasang. They look worried. If this weather doesn't let up tomorrow. . . .

But the next day brings more bad weather. The canvas over our heads is giving way under the weight of the snow. Dawa and I go out to collect wood, and when we return, the men are holding a special meeting. This is the first time in years that it has snowed this much this early. If the storm continues, they will have to leave their sacks behind and bring the yaks over the pass without their loads. They can return for the goods when the weather is better.

But on the fifth day the sun begins to peek through the clouds, and by afternoon, Lobsang has come to Dawa to discuss what route the caravan should take. The two leaders agree on one point only: the weaker yaks will not be able to reach the border and should be led back down to Piling. Eric joins the four boys who carry out this task. I stay in the tent to bring my diary up to date. By evening Dawa and Lobsang have finally come to an agreement: three yaks are not to be loaded, and they will clear the way. The weight

of their sacks will be divided among the other animals. Chusang will lead the caravan.

That night it is very cold. When morning comes there is no sound from the stream: it has been silenced by the surrounding ice. After leaving an offering of butter and tea on the cinders of our fire, the men feed and load the yaks, and the caravan is on its way. It is an arduous hike. Sometimes Chusang has to walk in front of the yaks in snow up to his thighs. The men shield their eyes from the sun; those who do not have glasses cover their eyelids with their braids. Two thirds of the way, one of the yaks collapses on the path, exhausted, and is unloaded by Lobsang and abandoned. Four hours later, we stop some 14,000 feet above sea level at the last camp in Nepal.

This is our last night with the men of the caravan. Inside the tent we offer our companions dried fruit and answer more of their questions: "Do you have relatives? Where are they?" Tshetan asks. Dawa leans toward us and confides, "They say that in your land snow is black." The next day when we reach the pass, the weather turns foul again, but by this time the men are no longer worried. They are back in their own country and from here on the trip will be downhill or on flat land. The high-lying plateaus of Tibet stretch out before them in the distance. It will take six more days for the caravans to reach their villages.

Dawa bids us farewell: "I am giving you the yak we left behind. You will let the next caravan know. *Ramro sanga djanus*—Go carefully!" He smiles and then disappears behind his yaks and the flour for which the men have traveled so far.

Ang Norbu

Twice a year yak trains climb this bleak slope toward the pass between Tibet and the Nepalese valleys.

Credentials speak

AMERICAN EXPRESS

©American Express Company, 1982

for themselves.

This is the charge card that says more about you than anything you can buy with it.

The Gold Card® from American Express®

Acquiring it takes credentials.

To qualify for the Card and all its services, you have to be accepted by both American Express *and* a major bank.

Once accepted, you're part of a group whose finances and credit rating are among the top five percent of the nation. Those who like to speak softly. And carry a big stick.

In addition to worldwide charge, travel, and entertainment privileges, financial services include a substantial independent line of bank credit, check-cashing privileges around the world, and access to a bank cash machine network in major cities around the country. For more information and an application, see your participating bank, savings institution, and places where the Card is welcomed. Or write American Express Company, Gold Card, American Express Plaza, N.Y. N.Y. 10004. 800-528-8000.

THE GOLD CARD®

By John Fleischman

Royal armor makes great escape from Tower of London

Shining works of the old-time armorers' art come to Cincinnati in first exhibit ever sent beyond the walls of the British fortress

"Ian and I are alike in that we think that armor is the most important thing in the world," says A.V.B. Norman rather dreamily, crossing his long legs as we settle down for a conversation on the evolution of the "great helm" (p. 71)—possibly an English headpiece from the mid-1300s—and the dating of Henry VIII's armors (pp. 68-69). By no coincidence is the *Encyclopaedia Britannica*'s "Armor" entry signed "A.V.B.N." Norman is Master of the Armouries at the Tower of London, and Ian Eaves is the Keeper of Armour. Eaves murmurs his total agreement on the primacy of armor; both men consider arms and armor a sadly underrated art form as well as a self-contained universe.

I have gone to London to get an advance look at the priceless examples of armor that are to be shipped to the United States in the first exhibit ever to leave the Tower in its 900 years of existence. "Treasures from the Tower of London," the 111-piece show, will be on view at the Cincinnati Art Museum from October 9-January 9, 1983. (Tickets are dated and may be purchased only through Ticketron or by writing to the museum.) The "Treasures" will next travel to the Royal Ontario Museum in Toronto to stay from March 19-June 19, and then back to the Tower. In the exhibition are several undisputed "national treasures," armors whose craftsmanship, artfulness and historical pedigree make them more valuable and more irreplaceable than the Crown Jewels, which are Johnny-come-latelies in the sweep of English history.

One of the finest and certainly the crown jewel of the exhibit is Henry VIII's 1520 "armour for combat on foot" (p. 69). Better than a portrait, it is the figure of the man himself, tailored in steel fashioned to cover every square inch of his body. To see this armor—it weighs 94 pounds and stands 6-feet-2-inches high—is to see Henry early in his reign when he was still the golden young king, a paragon of Renaissance princes, a man of learning and a man of action who delighted in the arts of manly combat. The external waist is but 34 inches and his steel ankle is a trim 10¼ inches. This is not mere courtly flattery. The armor was made for strenuous use, "friendly" tournament foot combat with poleaxes—long-handled battle-axes.

Henry's armor survived in the Tower while, over the centuries, tens of thousands of lesser armors were sold for scrap, given away, cut up for naval flak jackets or left to rust. It even survived the 1940 London blitz. So it is understandable why it took so long for the Master of the Armouries to allow a large chunk of his stewardship to cross the Atlantic. What lured him was the chance to show his arms and armors as fine art. "In the Renaissance, a prince would surround himself with beautiful objects," says Norman, "and one of the most beautiful things that Man has ever produced is a suit of 16th-century armor." The finest artists of the period —Leonardo, Holbein, Dürer—all made designs for armor decoration. The fine engravings on the metal, the play of light on the surfaces, abstract shapes—you can look at armor as pure sculpture.

For the conquered, an intimidating tower

The New Armouries building of the 1660s, where Norman and Eaves preside, is indeed "new" by the Tower's standards. The first structure on the site built by William the Conqueror to help consolidate his 1066 victory at Hastings was made of earth and wood and incorporated a section of the old Roman wall on the Thames at the eastern edge of London. For his most populous and restless town, however, William needed something more permanent and threatening. In about 1078, pale Caen limestone was imported for construction of a stronghold thought to have been designed by the Norman cleric Gundulf. This became known as "White Tower" (early on, it was whitewashed) or the Tower of London. Nine centuries later, it still dominates the East End cityscape (pp. 66-67). Extended and remodeled over the centuries, the Tower evolved into the large military complex of buildings now called the Tower of London. It is the oldest armory in the land.

In tournament, Maximilian had rounded handguard (left) for lance, leather-covered plating over torso.

Treasured armor from London's Tower

As it has for 900 years, the four-turreted White Tower, Britain's oldest armory, stands watch on Thames.

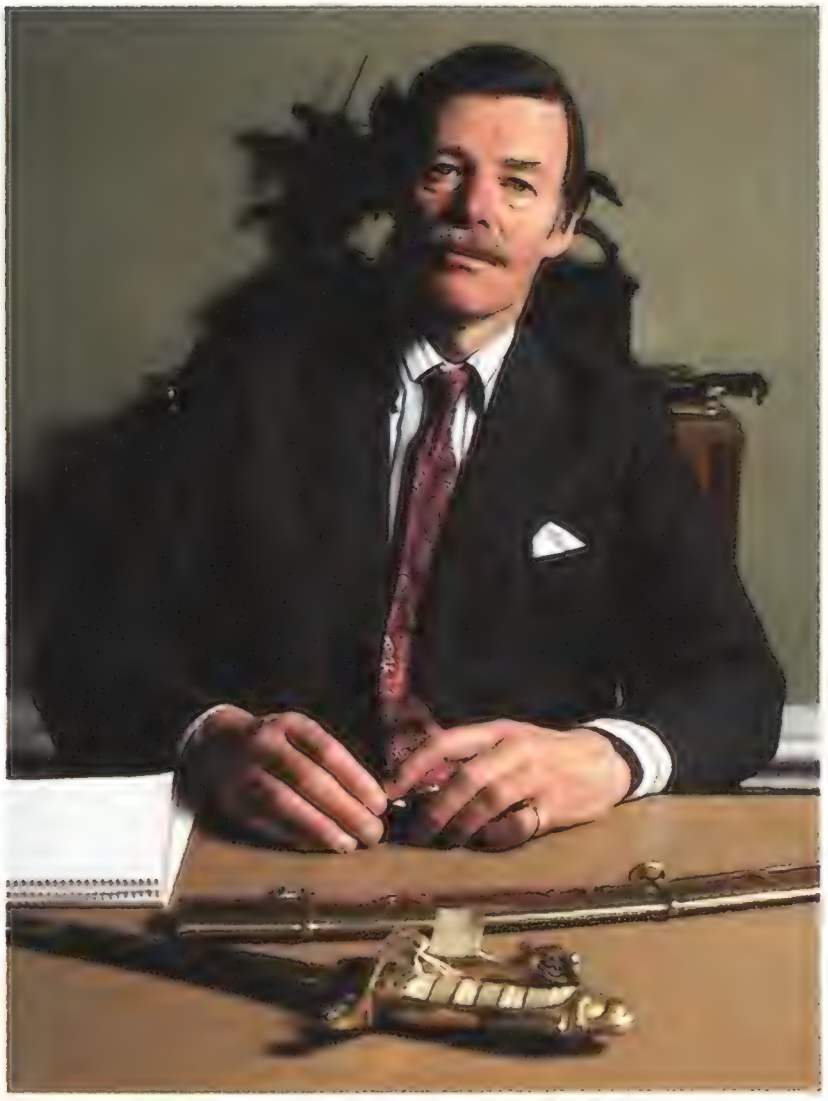
Eaves guides me from his headquarters to the White Tower. As we climb the stairs to the Tudor Gallery, he explains that there is very little pre-15th-century armor anywhere in Europe because mail is highly perishable (among other uses, it was cut up for scouring pads) and plates were cannibalized by later armorers. "There are no complete armors from before the 15th century, and even elements of such armors are of the utmost scarcity. A 15th-century complete armor—where all the elements belonged together—would be priceless today."

The "modern" collections of arms and armor have their origins with Henry VIII. His armor, his weapons and his wishes were their beginning. "There's very little here from before his time except what we've bought since," says Norman. "He didn't want his troops looking old-fashioned, so he had a good clear-out and started again."

Considering how long men have been making armor, it is rather sobering to realize how little is left. From the earlier Middle Ages, there remain a few scraps of mail, some helmets and weapons. From the Classical world, we have detailed descriptions of Greek and Roman armor but only extremely rare pieces. Presumably, armor is almost as old as weapons are. As Norman describes it: "The story of the development of armor is the unending contest between, on the one hand, the armorer seeking to improve his client's defenses, and, on the other, the weapon-smith trying to devise new and better instruments for penetrating these defenses."

In very early times body armor was made of hides or fabric often quilted for strength. A 14-layer linen fragment has been found in a Mycenaean grave dating from the 16th century B.C. Next comes mail, often redundantly called chain mail or ring mail. It is a mesh of interlocking iron or steel rings which look as though

At work in New Armouries building, Keeper of Armour Ian Eaves sorts authentic pieces from the forgeries.



Scholar Norman, presiding Master of the Armouries, believes arms and armor are underrated art form.

they were punched out of a thin sheet of metal or made by winding wire around a rod to produce a coil. The coil was then cut up one side and riveted shut when incorporated into the garment being made. The origin of mail is unknown but there is evidence that it was used in Europe as early as the second century B.C. The Bayeux Tapestry, although crudely embroidered, offers an important view of mail in the late 11th century. The mail shirt called a byrnie or hauberk is clearly depicted, as are coifs, or mail hoods.

Finally, there is rigid armor of metal, bone, wood or cuir-bouilli—leather made hard by boiling in wax. Scale armor was used in classical Greece, the Roman Empire and throughout Europe in the 10th to 12th centuries. Small plates linked by mail or sewn to fabrics were also used, but full-scale plate armor began to supplant mail in the 13th century. By the 1600s, European armor was almost pure plate.

The problem with mail was that the lethal English longbow and the powerful Continental crossbow could pierce it, and it offered little defense against heavy blows from axes or maces. Church effigies of fallen knights start to show metal plates on the knees in the mid-13th century. Gradually these poleyns and couters (for the elbows) sprouted longer plates. They spread up the limbs and onto the body. The growing tendency to completely envelop the fighter in plate armor was well under way by the 14th century. An elaborate terminology described the various pieces: breast- and backplates made up the cuirass, for the shins were greaves, for the thighs, cuisses. A vambrace covered the arm, the pauldrons, the shoulders. Solid steel breastplates grew horizontal plates called tassets to protect the hips and thighs. At first the plates merely met, but soon armorers devised bendable or articulated joints.

From European craftsmen, designer armor

Northern Italians and Germans became the best armorers. Their work in the 15th century followed two distinct styles: the Milanese, with smooth rounded plates, and the Gothic, which used metal corrugated with flutes. Then they adopted aspects of both styles. Great families of armorers—the Missaglias of Milan, the Helmschmieds of Germany—became as well known to soldiers as Stradivari and the Guarnieris were later famous among violinists. In the early 16th century the armorers of the Holy Roman Emperor Maximilian I created a bulkier style of rounded armor that was named for him. Documents of the time seem to indicate that the making of armor was a highly specialized process with different artisans passing a piece along from one to another, each performing his own specialty, including the "locksmiths" who made and attached the hinges and fastenings.

Henry VIII's growing girth is immortalized by the tournament armors that literally span his reign.

From left: young king, circa 1511; slim, of silver, circa 1515; stout steel, 1540; 1545, protected paunch.

Through all this, the English nobility had sent off to the Continent for the latest in armor. A noble would dispatch a suit of clothing or an old arming doublet —a padded garment worn under metal armor—for the armorer to take his measure. For all its practicality, armor closely followed the cut of men's ordinary clothing. The pointed-toed sabbatons of the 14th century that aped the courtly fashion turned into the broad-toed style of the early 16th. Continental armorers were usually politically indifferent about their clients, but the English shortcomings in quality armor making became a matter of national prestige by the time of the Tudors. The boy Prince Henry, who had sheltered at the Tower during a rebellion, came to the throne in 1509. Now, England and the Tower would dance to Henry VIII's bolder tunes.

Quality English armor began with Henry VIII, and when Ian Eaves and I emerge in the Gallery, there he is. As we move toward the armored Henry, Eaves points out a grotesque helmet with ram's horns and a bespectacled steel face (p. 73). This is all that remains of a magnificent armor presented by Maximilian to Henry in 1514. Antiroyalist Oliver Cromwell's Council of State later sold the gilt-silver armor, along with other precious objects in the Tower, and it was melted down. They had no love for the trappings of kings. Besides, they wanted the money. A royalist bought some of the pieces and eventually returned them to the Tower. But only the bizarre helmet of this Innsbruck armor managed to escape destruction (to see it you must go to the White Tower; it is not part of the "Treasures" exhibit). It represents the armor that finally goaded Henry into establishing a royal workshop at his Greenwich palace in 1515. The London armorers'guilds were so strong that foreign armorers were barred and had to work outside the city. To establish an "English" fine-armor industry, Henry set up German and Flemish craftsmen at Greenwich.

Standing before Henry's Greenwich armor for foot combat (opposite), I can see why it is billed as a national treasure. "It scares me," Eaves whispers, "to think *that* is going across so much water." The armor is smooth. It has no etching or embellishment to distract the eye from its function. Even without knowing its history, I would still be struck by the deceptive

Author and armor aficionado John Fleischman lives in Cincinnati, is a senior writer at Ohio Magazine.

In Henry's prime, about 1520, foot-combat regalia was made at Greenwich workshop. Originally black and "rough from the hammer," its "shining armor" surface evolved during 300 years of regular cleaning.

Treasured armor from London's Tower

Future Charles II—last British king known to wear head-to-toe armor—had ornate horseman's outfit, 1644.

simplicity. How can a man be totally armored? Here is the solution. Here is the man of steel.

To see the full story of Henry VIII in steel, you must also go to Windsor Castle. Four of his armors at the Tower and one at Windsor constitute a vivid record of his physical deterioration from the slim golden king of 1511 to the hulking, pot-bellied old man he was in 1545. Eaves draws my attention to the garniture—accessories—of 1540 (the only armor shown here that can be precisely dated by the year etched in the decoration, and not discovered until 1964), a massive armor for an older, bear-shaped Henry. It came with several dozen extra pieces so that it could be rigged up in different ways. Henry could turn out for the tournament, the joust and foot combat, as well as for field service on foot, as a lancer or as a light cavalryman.

This garniture shows the directions that armor was taking in the 16th century. It was first and foremost for war, with tournaments and parades the other great uses. By then, tournaments had become a colorful blend of war games, sport, theater, pageantry, diplomacy and conspicuous consumption, "rather like the modern Olympics," says Eaves. "They were occasions of great national prestige with a lot of opening ceremonies and a lot of ritual between the fights." Henry VIII gloried in the "lists," the arenas for mock combat. The appeal for him is described by historian Garrett Mattingly: "Sheathed extravagantly in German or Italian plate armor more cunningly joined than a lobster's mail, fluted and braced and inlaid with gold, he would thunder down the lists on a magnificent stallion, the Duke of Mantua's gift, plumes flying, a very god of battles. One hears the splinter of lances and the roar of applause . . . as some courtier acknowledged the superior prowess of his king. It was amazing good fun."

Only the best for a monarch's favorite

Elaborate armors made princely gifts. Greenwich armor was the grandest token Henry or his successors could bestow upon a favored courtier. Eaves steers me round to a prize example, the armor fashioned for Robert Dudley, Earl of Leicester (p. 72). It was made at the Greenwich workshop, probably for use at the festivities he staged in Queen Elizabeth's honor in 1575. What has survived is an armor for the tilt, where two armed riders race toward each other on opposite sides of a barrier, passing left side to left side and earning points according to where they hit each other with their lances. The left side of the helmet is without vent holes, or "breaths," to protect the face from lance splinters. The tournament was so specialized an activity that the armorer could ignore the basic requirements of a field soldier for good ventilation and upper-body mobility. Leicester's complete garniture

probably had lighter and more open alternative pieces to make it supportable on a real battlefield. But it is the surface of the metal that fascinates: decoration runs riot—leaves, badges, on every plate. Here, art is getting the upper hand over grim warfare.

Another royal armor that has traveled to Cincinnati is an even more elaborately decorated boy-size suit made around 1640 for Charles II when he was Prince of Wales (opposite). Parade armor was by this time "essentially male jewelry," exhibiting the rank and wealth of the wearer, according to Eaves.

Awkward, helpless, clanking beetles?

We slip out of the White Tower by a back stair and as we retrace our steps to the New Armouries, Eaves dispels a number of misconceptions about armor. Chief among them is the idea that a man in armor was awkward, and once knocked down was stuck, helpless as a beetle on its back. This is not only untrue, it is illogical, he maintains. The purpose of armor was to give a man an advantage in battle, not to make him a pushover. Battle armor weighed only about 50 pounds, distributed all over the soldier's body—even mounting a horse was no problem. Nor did armor "clank," an invidious notion Eaves lays at the door of Mark Twain and his Connecticut Yankee. (He and Norman chuckle at movie armor's outrageous lack of authenticity.) Then what *does* armor sound like? "There *is* a sound you get from armor plate," he answers, "but it isn't a clank at all. It's difficult to describe. It's a shearing noise. Once you've heard it you know what it's like."

The Master of the Armouries is at his desk, holding a wicked-looking cutlass in his white-gloved hand while examining the blade under a magnifying glass. We take up the tale of the decline of the armorer's art. By the late 16th century, handguns were becoming more efficient and deadly. To resist bullets, armor plates were thickened. Armorers practiced an early form of consumer warranty by firing a ball at a new breastplate or helmet as "proof." Sometimes a client would show up with a special gun, much to the dismay of the armorer: "Heaven protect me," grumbled one Italian artisan, "from the musket which has been specially loaded at home." Armor *could* be made bulletproof—a Captain St. Martin, for example, was hit 30 times by musket balls at the Siege of La Rochelle in 1573 and was unharmed—but that made it heavy. "One of the great complaints in Elizabeth's time was that the soldiers wouldn't wear their armor on the march," recounts Norman. "The army had to have carts to carry it." By 1593, Sir Richard Hawkins was complaining that although he had a good supply of armors, "yet not a man would use them but esteemed a pott of wine a better defence than an armour of proofe. . . ." Instead

British light cavalry armor, about 1650: hook locked iron cover on more vulnerable leather shoulder strap.

Ruggedly simple "great helm," 5½ pounds, is possibly English, late 1300s. "Breath" holes are only on right.

Earl of Leicester's ornate armor for the tilt—duel of horsemen with lances—epitomizes armorer as artist.

of complete armor, soldiers favored body armor and an open helmet.

The use of armor in war never completely ceased. Steel breastplates and helmets were worn in combat by *cuirassiers* from the English Civil War to the Franco-Prussian conflict. In the early Indian wars in the New World, armor was used by English soldiers up against bows and arrows. Rochambeau of France is said to have worn his siege armor during the Yorktown campaign in 1781. A New Haven factory made seven-pound "steel vests" for Union soldiers in the American Civil War. Wearing such a protector, General Nathaniel Wales of Massachusetts was hit square in the chest by a rifle ball at the Battle of Antietam, suffering only a bad bruise.

It was the First World War that returned armor from an arcane specialty to a military necessity. Trench warfare was remarkably similar to medieval siege warfare. The head of a soldier in the trenches was the most vulnerable part of his body. Early in the war, both sides realized that steel helmets would prevent many head wounds. So opened a strange new chapter in the armorer's craft.

France's General Adrian designed the first Allied helmet after talking with a wounded poilu who said his life had been saved by a metal mess bowl inside his cap. The search for an effective model sent both sides back to the Middle Ages. Bashford Dean was the curator of armor at New York's Metropolitan Museum of Art when America entered the war in 1917. He was commissioned a Major of Ordnance and assigned to an Armor Unit. General John J. Pershing, head of the American Expeditionary Force, urged the Ordnance Department in the summer of 1917 to continue its effort "towards the development of a satisfactory form of personal body armor." "It may be safely said," Dean later wrote, "that there was not an important collection of ancient armor in Europe which was not visited by commissions, collectively or individually, in an effort to learn from the experience of the past."

From the Metropolitan, clues to strength

Fragments from the Metropolitan's armor collection —one of the largest holdings in the world—were analyzed by William Campbell of Columbia University. He found the better pieces to be 70 percent as resistant to piercing as the finest helmet steels being produced at the time for the British Army. The armorers, while probably not knowing why iron ore from one mine was better than another for their purposes, apparently took advantage of natural alloys high in such components as chromium and nickel, found in certain mines including those at Maximilian's Innsbruck.

Dean's research was not limited to helmets. Reports came in that German infantry was outfitted with heavy breastplates and tassets that looked like their 14th- to 16th-century counterparts. A number of experimental helmets on both sides resembled 16th-century jousting helmets. The Metropolitan's own workshop made experimental helmets and bulletproof vests. A German siege helmet captured at Verdun in 1917 was put on exhibit in New York. It turned out to be closely modeled on a 16th-century Saxon helmet.

The search for "proof" armor goes on: canvas and plate flak jackets were issued to bomber crews in the Second World War; Vietnam saw the emergence of American infantry fiber vests that look very much like Renaissance "jacks." The late 20th century has also given us soft bulletproof armor constructed with space-age fabrics for civilians-at-risk to wear discreetly under their street clothes.

In the twilight of the "shining armor" age, leaders held the longest to the symbolism of armor as a proper martial costume: victorious generals still posed in it for their portraits well into the 18th century, according to

Norman. The Tower armories had dwindled long before, with much of the stock recut to newer fashions or condemned as "unfit for modern warfare but good against native men," a reference to armor sent to protect the Jamestown colonists from the Indians.

The Gothic Revival created another demand for old armor—as a motif in interior decoration. No Victorian Gothic castle was complete without its armory. The intervening years having swallowed up a great deal of authentic armor, counterfeiters set out to satisfy the market, creating problems that bedevil armor experts today. "Some of the forgeries are very good indeed," says Norman. "Some are bits and pieces of old plain armor decorated so that it makes it difficult for one to tell. And now it's got 100 years of wear on it."

Today medieval armor is a very small but fiercely contested field of historical and art scholarship. Research involves trying the armor on. Because they are tall, neither Eaves nor Norman has found a complete suit that will fit. The legs are a particular problem, according to Norman, "but I always put on the helmets. It's important to see out and see how much vision you've got. If you can't see out, it's probably not genuine. I've looked out of Henry V's helmet. It was very exciting. It was put up over his tomb after his death and I put it on at Westminster Abbey Library when I was working on it. It was marvelous. I could see the lilies of France coming over the green fields of Agincourt."

Back home in Cincinnati, although the view is not of the lilies of France, a question I had asked in the Tower continued to nag me. What *did* armor sound like? Millard Rogers, director of the Cincinnati Art Museum, was intrigued as well. We set out for the museum basement where a few lesser pieces of armor holdings are stored. After locking and unlocking a series of doors, we came to the dusty shelves. There was a neckpiece, a vambrace and a tasset. Rogers turned them over. They were in poor condition, the leather straps worn and the sliding rivets loose. He passed me the tasset. I draped it over my thigh and raised my knee. It clanked. Rogers was amused with our discovery. Upstairs, by the light of day, he made another. He held up his hands, palms toward me: "I tell you one thing about collecting armor. It's the dirtiest art you can curate."

Leering head mask is from gift of Maximilian that helped inspire Henry VIII to found his own armory.

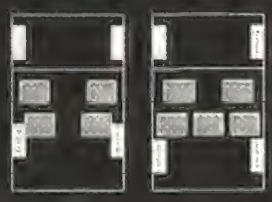
Now Renault bridges the gap between European

The New Renault Alliance

A five-passenger sedan of European design for the price of a four-passenger econobox? Until now, the idea was inconceivable. But now the Renault Alliance is here. Designed in Europe…built in America…so its price is just $5595.*

How five arrive in comfort.

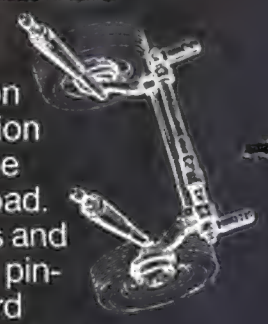
Unlike Escort, Rabbit or Honda Civic, the new Renault Alliance comfortably rides five, not four. How'd we do it? By moving the rear wheels back and away from the rear seat, we were able to improve ride characteristics while giving Alliance eight inches more rear seat hip room than Escort.



We found more room for improvement by putting the front seats on a pedestal. Literally. So rear seat passengers can slide their feet under the seat and enjoy the ride.

The making of a great performer.

The new Alliance has front wheel drive, a Renault tradition. And a fully independent suspension featuring twin axial torsion bars—something no one else has—to level the road. Power front disc brakes and self-centering rack and pinion steering are standard equipment. As are radial tires, electronic ignition and, unique to Renault, an oil level gauge.



Under the hood, Alliance's 1.4 litre engine is electronically fuel-injected: a microprocessor chooses the most efficient air/fuel mixture as driving conditions, or even the day's humidity, change. Small wonder, then, that Renault Alliance achieves such outstanding mileage.** And here's another small wonder: when you opt for automatic transmission, a micro-

*Manufacturer's suggested retail price for the Alliance 2-door. Price does not include tax, license, destination charges and other optional or regionally required equipment. **Compare 1983 EPA estimates with estimated MPG for other cars. Your actual mileage depends on speed, trip length and weather. Actual highway mileage and CA figures will probably be lower.

SAFETY BELTS SAVE

excellence... and affordability.

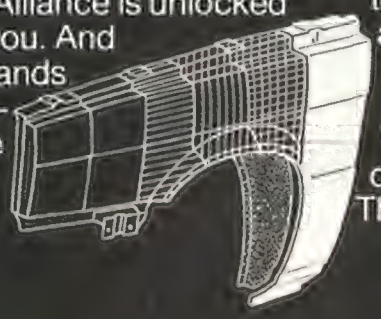
computer determines the optimum moment to shift. And does so, automatically. Economically.

Technology with a capital T.

Renault is not only Europe's number one car maker, but a world leader in reprogrammable industrial robots. So it isn't surprising that Alliance is the product of advanced technologies like UNISURF. To assure uniform surface and fit a computer probe "reads" the specifications of the design model, which are translated to the finished Alliance body within a tenth of a millimeter—about the thickness of a blade of grass.

52 est. hwy.
37 EPA est. MPG

Or consider just one state-of-the-art option—an infrawave keyless entry system. Simply push a button on the special key ring as you approach: your Alliance is unlocked and waiting for you. And only you. Thousands of available combinations ensure your complete security.



Designed in Europe, built in America. To last.

Since its introduction one year ago, the European version of the Alliance has been driven over a half billion miles by nearly two hundred thousand owners. And by the 52 automotive journalists from 16 countries who voted this new Renault Europe's Car of the Year for 1982.

Designers at both Renault and American Motors have gone to extraordinary lengths to assure the longevity of the Alliance. Galvanized steel in every exterior body panel receives a zinc-phosphate pretreatment and an electrically bonded cathodic bath. Which makes it possible to offer a five-year No Rust-Thru Limited Warranty™ as part of American Motors' celebrated Buyer Protection Plan.℠ With the only full 12-month, 12,000-mile warranty that covers virtually every part, even if it just wears out. But the biggest achievement of all is that Alliance offers sophisticated European engineering for a price that starts as low as $5595.

Renault Alliance. The Alliance of quality and affordability is here. At Renault and American Motors dealers.

$5595*

RENAULT
American Motors

Article and photographs by Lawrence Wishner

Chipmunks: lively lords and ladies of our woodlands

Chip-chip-chipping along through millennia, these nimble rodents ask and give no quarter, survive by industry, thrift and an acute hearing

Whether or not Man is an endangered species may be a favorite topic for discussion when chipmunks get together—but not too close together—to sing on an April morning. If we do not speculate similarly about *them*, it is for the obvious reason that chipmunks are far from endangered.

Chipmunks have learned to live in close contact with Man, but nevertheless independently. Perhaps not becoming dependent is the very heart of their charm. Their cousins, the tree squirrels, do become dependent and overpopulate suburban areas, turning sneaky, comical and ungainly as they rely more and more on Man's conscious or unconscious unselfishness. Chipmunks, on the other hand, always retain what naturalist John Burroughs called the squirrel's "sylvan airiness and delicacy . . . its nervous restlessness and wild beauty, all its jauntiness, archness and suspicion."

This tiny, striped featherweight—nine inches nose to tail tip and weighing only three to four ounces—fills its capacious cheek pouches to bulging over and over, day after day, during every season of its activity, and carries food home to its underground burrow in response to what appears to the observer an obsessive genetic fear of starvation. When food is scarce, it has its stored supply. When food is plentiful, it becomes more active

Camouflaged by his striped coat, young chipmunk only a few days out of burrow explores rain-soaked forest.

The Eastern chipmunk—a survivor

Confrontation over sunflower seeds: Fenwick (left), pouches bulging, dares Lady Cheltenham to partake.

in obtaining a greater share of the wealth. This cushion of food, upon which the chipmunk literally sleeps, allows it to maintain its aloofness, all the while sublimely unaware of representing, to us, a living example of thrift, industry and independence.

When I began my study it seemed to me that an animal as winning as a chipmunk deserved a three-syllable name; then each individual's behavior automatically took over and determined its cognomen. "Lady Cheltenham" fit my first chipmunk, a dignified, indomitable female, to a tee.

One November day I watched Lady Cheltenham from her first appearance outside her burrow at dawn to her retirement at dusk. She transported acorns to it continuously from the opposite side of the house where I had set up shop. The round-trip journey of about 200 feet required two minutes, including the time taken to fill her pouches with five three-quarter-inch white oak acorns (three in one, two in the other) and pick up the sixth in her mouth. Had she pouched the sixth, she would have been able neither to close her mouth nor get through her front door. She emerged about 6 A.M., breakfasted, harvested between 7 and 12, enjoyed a siesta from noon to 3 P.M., and then returned to work until 6, after which she relaxed near her burrow until retiring at dusk. During the periods of intense activity, she rested and groomed herself for about five minutes every four or five trips.

From these observations we can estimate that she carried about 116 acorns per hour and 928 during the day's activity. Later experiments on pouch capacity showed that Lady Cheltenham could carry an average of 12 to 15 half-inch willow oak acorns. Gutrune, a female who appeared the following spring, was able to carry an amazing average of 35 whole sunflower seeds at a time.

Both casual and serious naturalists have observed for many years that chipmunks sing in chorus for about a week during the late spring and again in the early fall. They tend to be relatively inactive, a state known as restless hibernation, for two to five months in wintertime. But spring and fall the chip-chip-chip of sometimes dozens of chipmunks fills the woods by day. Although the animals may or may not know why they do this, it all seems to serve useful purposes.

Adults, the orators, appear to be declaiming their territorial rights, while the listeners, juveniles just starting out in the world, almost certainly need to know when they have reached an area with enough elbow room for a happy and fruitful existence. There is no altruism involved. Although the juveniles may not be able to count the voices, they can certainly judge the volume level and complexity of the chorus to the extent necessary to know when and where to stop and settle in.

Predators, apparently quite aware of this dispersal and the opportunities it augurs for a meal of tender young chipmunk, need to concentrate on stalking their prey. Like the Light Brigade, with chipmunks to the left of them and chipmunks to the right of them singing their hearts out, the predators seem unable to charge into the valley of gourmet dining. It presents just too many choices.

When we walk through the woods, on occasion we violate a chipmunk's elbowroom and so it departs quickly, with a trill. It is common then for the indignant subject to reappear at some safe location and sing a rapidly composed song. I have seen domestic cats produce the same response. The song always comes from

Eastern Chipmunks, *the author's report of a six-year study of 59 resident and 49 transient chipmunks on 1.5 acres in Piedmont Virginia, will be published this month by the Smithsonian Institution Press.*

A quick retreat: his bluff failing, Fenwick bares his teeth and vocalizes, sending her scrambling for safety.

Again a loser: beset by Don Diego, although first at table, Lady C. leaps, proving herself an artful dodger.

out of harm's way, being behind the cat's route, never ahead of it. Other chipmunks in the immediate area become alert, but 60 feet away activity continues normally. The few times I have watched a red fox walk through the area, there was only silence. Apparently foxes are considered professionals, in an entirely different class from soft, house-fed pussycats.

Tuesday, May 20, dawned with a clear sky and a temperature of 60 degrees F, portending a beautiful spring day in the woods. Only the songs of birds broke the silence of one of nature's finest hours. Young chipmunks had gone to seek their fortunes and the adults were left alone in the world of their feelings and perceptions, defined for them by their particular sensory apparatus and probably not very similar to our world.

A few moments before 6 A.M., sounds of digging and scratching in the earth were heard from Lady Cheltenham's burrow as she began opening the entrance she had so carefully closed the previous evening when she retired. This security measure probably was not taken in the false hope that it would prevent the entry of a black snake, a weasel or even a rat into her well-concealed domain during the night, but rather so that the predator could not enter silently, giving her no time to defend herself—for despite the small size of its ears, the chipmunk's hearing is its most powerful and valuable sense.

Although the importance of a chipmunk's hearing is apparent after even superficial observation for a period of time, an incident confirmed it dramatically. One day in the fall of 1978 I was observing Lady Cheltenham's burrow from a blind close by, while monitoring with headphones the sound from a microphone mounted five inches above the entrance. Her daughter, Mistress Earwicker, was situated at the entrance to her own burrow about 15 feet away and completely out of sight of her mother's entrance. Consistently, for almost two hours, sounds from Lady Cheltenham's burrow, barely detected by the microphone, caused Mistress Earwicker to direct her attention toward the area of her mother's burrow.

This May morning, the scratching sounds from the burrow gradually subsided and were followed by five minutes of silence as Lady Cheltenham waited patiently just below the surface, listening attentively. Ever since her first introduction to the world from a similar burrow, she had listened, becoming habituated to the normal sounds of the woods—birds singing, leaves rustling in the wind, a branch falling, the hopping footsteps of a rabbit, the background noise of nature. What she did not want was silence, for if the birds were quiet and if there had been no sense of motion, that would have indicated the presence of a strangeness, perhaps a predator, something she understood—or worse yet, something she did not.

Having sensed nothing unusual, Lady Cheltenham raised her head above the surface, looking toward open ground. Confident that nothing could sneak up from the brush behind without detection by her sensitive ears, she examined the open lawn with her less sensitive eyes. She was looking for movement. Not the movement of the grass in the wind, or of the birds, a squirrel, a rabbit, but rather for an unfamiliar movement, one that was out of place in her world. Had she seen such, she would have disappeared back into the burrow in a flash.

The weakness of chipmunk vision is frequently shown in their behavior, particularly their difficulty in locating dropped objects or even each other in the grass. A pursued chipmunk will often simply stop and remain frozen. The pursuer is likely to depart, disappointed at not having been able to locate its quarry even after searching within a few inches of the target.

Chipmunks' inability to locate one another under

Watchful Lady Cheltenham leads her young from burrow for a first view of the big outside world.

It looks so enticing that one venturesome juvenile strays too far, is herded home by its stern mother.

Having seen the world, two of Gutrune's youngsters gratify their curiosity by exploring one another.

these circumstances would also seem to indicate a poorly developed sense of smell, an uncommon deficiency in most rodents and especially in other squirrels, where olfaction plays an important role. Although they frequently appear to mark territorial areas with urine and feces, and although they possess rudimentary anal scent glands, chipmunks' chemical communication appears confined primarily to the male's detection of estrous females.

When that happens, these normally solitary animals become spectacularly social. Whether or not individual courtships can take place depends upon how many males have got the word that a particular female is in heat. If more than one is in the area when she decides the time is right, a chase of sometimes monumental dimensions occurs, leaving little time for courtship when she finally selects her partner. These chases may last between two and nine hours. The female's strategy seems to be to lead the males a merry chase and eventually to surrender to the one who is best able to keep up with her. Presumably he is the cleverest as well as the strongest.

From a hollow stump, explosion of chipmunks

Chipmunks usually mate twice a year, and the female's tactics are at once ingenious and amusing, taking somewhat different forms during the spring, when the woods are bare, than during the summer, when it is easier to hide. The female outmaneuvers the males time after time. A favorite tactic is to stop abruptly, and—after the males have trundled past—to reverse direction while they split up and begin searching for the trail. Another is to dive headlong into a hollow log or stump and either escape through a secret opening or wait for her pursuers to funnel into an area in which they cannot all possibly fit. During one such chase, Gutrune led four males into a hollow stump from which, an instant later, six chipmunks exploded in all directions. No telling who was the more surprised, the invaders or the invaded.

Since the female is so clever at evading her pursuers, they spend most of their time trying to find her, frequently climbing to elevated positions to do so and just as frequently returning to her territory to begin the search anew. One of them generally can be seen guarding her entrance throughout the chase, and the guard may be changed regularly. They will also enter her burrow, often to find it vacant. This may be what stimulated John Burrough's famous comment: "What a train of suitors she had that day!" She was probably not at home.

Satisfied that there was no recognizable movement on the lawn that Tuesday in May, Lady Cheltenham climbed out of the entrance, sat upright with her front

paws clasped to her breast, and proceeded to gaze and listen in every direction, a picture of the alertness that characterizes a chipmunk.

Convinced by 6:15 that all was in order, she relaxed and moved slowly to a hickory tree 15 feet south of her entrance, scampered to a branch about six feet above the ground, and began her morning song. She chipped regularly at a rate of 110 chips per minute for approximately ten minutes; her typical, high-pitched song could be heard 600 feet away. What was she saying or, rather, singing? The motivation for the chipmunk's spontaneous song has never been explained.

Having notified the world of the state of her existence, Lady Cheltenham stretched herself luxuriously in a gesture of purely decadent relaxation. Grasping the trunk of the tree with her hind feet, she extended her front legs fully downward and outward, while arching her back to its utmost extent away from the tree, hanging there for several seconds with every muscle stretched to the breaking point. Then she descended the tree and returned to her burrow entrance, where she began her morning bath. Using teeth, tongue and claws, she scoured every part of her body. She washed behind her ears, but neglected to dry between her toes. In less than three minutes she was perfect. Cleaning activity is not confined to the morning bath, but reappears periodically throughout the day. It seems to be an attitude rather than a task, and may foil predators who operate by sense of smell.

They are relentless groomers, and Fenwick finishes the job by drawing his tail through teeth, over tongue.

Bedding down on shredded oak leaves

By 6:30 A.M. Lady Cheltenham, wide awake and squeaky-clean, was ready for a day of adventure. She began foraging in her territory, moving slowly from place to place while examining the ground carefully. Occasionally she stopped to taste a discovery, never too absorbed to come alert every three or four seconds and look around. Often these pauses lasted for several seconds, or even as much as a minute, as she stared attentively in the direction from which she may have seen a strange movement or heard a strange sound. Eventually she approached the edge of the woods and encountered a bed of dry oak leaves. She picked one up with her teeth and, rising to her full duckpin height, neatly folded it against her breast with her forepaws, stuffed the compact bundle into her mouth, and smartly carried it into her burrow to be shredded for bedding.

I have noticed over the years that this leaf gathering seems to be a kind of synchronized behavior. A number of chipmunks may be active in the woods at a particular time doing various things. Suddenly they are all seen gathering leaves at once for several minutes, as though a news broadcast had predicted an impending shortage. This behavior has been too consistent to be coincidence, but the reason for it is unclear. Lady Cheltenham reappeared from her burrow within a minute or so with much less caution than we observed earlier, and continued gathering leaves for five or ten minutes, by which time her mattress had apparently been fluffed up to comfortable proportions. She then went back to foraging, but farther from home.

During her previous activities, she had frequently paused and focused her attention on the back porch of my house, about 30 feet away, as though to decide whether that strange bipedal creature who lived in the stone mountain with holes in its sides had provided the usual supply of sunflower seeds and whether the other chipmunks were helping themselves.

She scampered 25 feet southwest to the dogwood tree by the well, paused briefly on a low branch for a final examination of her destination, and dashed the last 25 feet west over a well-worn path to the porch. Yes, the others were competing ferociously for seeds in the log pile and on upturned logs that represented feeding tables. She spent the next several hours in competition, filling her cheek pouches and taking home load after load of sunflower seeds at a mad pace, frequently making the thrushes on the lawn jump out of her way. Each time she ferried a load home, she would emerge from her entrance a minute later with little apparent caution, pause momentarily, wash her hands and face, and dash back to the porch. The inevitable face washing probably was necessary because her distended cheeks rubbed against the sides of the entrance when she went down to unload. Indeed, sometimes there was difficulty fitting her swollen head into the door at all.

As her excitement and the competition increased,

Strrretch! A few days out of burrow, young chipmunk tries climbing, finds coordination not all it might be.

she began announcing her departure from her territory each time with an authoritative cry: "Chirrup, chip, chip, chip." I always interpreted this cry simply as a sign of exuberance rather than as a warning to competitors, because no one seemed to pay it any attention. Had she been saying, "Outta my way, you bums, here comes the fiercest chipmunk in Spotsylvania County!" she would soon have given up for lack of response from her neighbors.

Shortly before noon the food supply had been exhausted. Since she lived close by, Lady Cheltenham remained on the porch exploring the woodpile or just meditating on a log. She stretched out comfortably on the table or the top of the woodpile, and, with paws crossed in front of her, stared silently into the woods for long periods of time, in a beautifully meditative posture lasting almost two undisturbed hours while all of the others had gone home or to forage elsewhere. Suddenly she was on her feet and home into the burrow for an afternoon siesta, a common practice during the heat of the day.

Burrows are really quite marvelous feats of engineering, and their construction and structure reflect many of the instinctive aspects of the chipmunk's success in the world. They also could serve as models of efficient land use for the ecological movement, since they involve the removal and rearrangement of great quantities of earth with virtually no alteration of the surface. Chipmunks are not strip miners!

In the sandy gravel of the Fall Line area of Virginia, one can always recognize the entrance to a chipmunk's burrow—if one can find it. A circular hole one and a half to two inches in diameter which extends vertically for at least four inches and shows no evidence of having been dug is almost invariably the door. Usually burrows are located at the forest edge, protected by at least the cover of trees, but may on occasion be found on an open lawn.

Burrow construction is carried out through a "working tunnel" from which all dirt and stones are removed by pushing with nose and feet. At the very last an entrance tunnel is excavated, all material from it being used to close up the working passage. The neatness of the entrance discourages discovery by both predators and humans, as was revealed to me one day when Gutrune suddenly appeared at a location from which she had never before emerged. She arose out of the ground like Erda, Wagner's earth goddess, her head raising a small circular flap of moss like a trap door. When she left her new entrance the moss fell back into

As they soar, so do hearts.

Without voice, their bodies sing songs. Without words, their movements tell stories. Using only motion, ballet dancers can move others. Now,

Ballet West, an emerging force in American ballet, is lifting this art form to greater heights. As a major touring company, its members enrich the lives of thousands of Americans. By achieving what most find impossible, they make the heart soar. Phillips Petroleum is glad to help fund them because they help lift the spirits of us all. PHILLIPS 66

For additional information contact Ballet West, 50 West 200 South, Salt Lake City, Utah 84101.

place, leaving no evidence of a hole. When she returned it took her about 20 seconds to relocate her entrance, then quickly detach the patch of moss, disposing of it in the woods.

Extensive systems described in the literature have up to 100 feet of tunnels, a 25-by-15-by-10-inch nesting chamber, an average of three additional 10-by-15-by-6-inch storage chambers, and up to eight smaller rooms. In addition, there are numerous side pockets, sometimes referred to as blind tunnels or galleries. Most chambers have at least two entrances, and the tunnels connecting them are three to four inches in diameter.

At 5:30 P.M. Lady Cheltenham reappeared from her burrow much as she had in the morning, but with not quite the caution of her earlier emergence. She came to the porch at once to see if the larder had been replenished, and was not disappointed. But the supply was more limited and the competition not as intense. After carrying her share home she again remained on the porch exploring. Suddenly she encountered something new—a microphone I had placed close to the floor to record the sounds coming from deep inside the woodpile. As it always does, curiosity triumphed and she approached the strange oblong aluminum object cautiously, her tail swinging from side to side with a rippling motion.

As she slowly closed in, her hind feet suddenly went no further and she stretched her body in order to bring her nose and whiskers in contact with the alien artifact. It was as though her hind feet, stamping alternately, said "no closer," but her exploratory instinct had to be satisfied. This is typical behavior. So, having decided that the new object was harmless, Lady Cheltenham went about examining the rest of the porch.

As dusk was falling and it was time to go home, she seemed nervous. Whether this nervousness resulted from the growing darkness or from anticipation of what was to come cannot be said, but she remained upright at the edge of the porch, staring fixedly at the dogwood tree for five minutes. There were several false starts toward the tree and each time a return to the edge of the porch to reexamine her route. She finally dashed madly toward the security of the tree. Three-quarters of the way, a Red-tailed Hawk dropped like a stone out of the sky with her striped back directly in its sights.

Whether Lady Cheltenham's sensitive ears detected the rush of air through still feathers as the hawk spread its wings to break its fall, or whether her sense of survival acted in some mysterious way, she changed direction at what seemed the instant of impact and escaped into a hole beneath the tree. No chipmunk travels without a complete knowledge of hiding places. The hawk thrashed on the ground for several seconds, either looking for its lost dinner or trying to free its claws from implantation in the ground, while Lady Cheltenham began singing a soft chucking song from her sanctuary.

Her song was clearly audible to me 30 feet away, but the hawk paid no attention and finally flew off, mourning its lost culinary delicacy with a series of hoarse whistles. Ten minutes later, Lady Cheltenham ended the song and ran with truly inspired enthusiasm to her burrow. She was heard scratching and digging with extra zeal, securing her home for the night. So ended, on this melodramatic note, a typical early summer day in the life of a chipmunk. From the Eastern chipmunk we have learned the lesson of how an animal survives and prospers by minding its own business.

Absorbed in plenitude of seeds, cardinal is unaware of Diarmuid's advent. In an instant, both will flee.

Tamora, Lady C.'s granddaughter, has pouches crammed with free lunch of seeds strewn in author's woodpile.

If it's the best telecommunications system on earth, why on earth change it?

If you've ever tried to make a telephone call anyplace else on earth, you know what you've got in America. The best telecommunications system in the world.

But now you've heard the Bell System is on the verge of major changes. Changes in how we're organized. Changes in the way you can choose to do business with us.

Why change something that works?

There's a very good reason. The telecommunications business itself has changed.

For most of our history, the Bell System has had one overriding goal: universal service. Dependable telephone service at reasonable rates for everyone who wanted it.

Bolstering that goal were government policies determining that telephone companies would operate differently from most American companies. Within many areas of the country, we were to be the exclusive supplier of telecommunications services. And since the Bell System didn't operate in a competitive market, its rates and profits were strictly regulated by the government. But today the goal of universal service has been achieved. Over 96% of American households have telephone service.

Now regulators and legislators in this country are looking more to the marketplace and competition, rather than to regulation, to decide who will provide competitive services and equipment and how they will be priced. In part, this stems from an increasing sentiment in this country for the deregulation of major industries.

But perhaps most important is the fact that technology has changed the future of telecommunications. We are about to enter a new era–the Information Age. The technology of communications gradually has merged with that of computers. The marriage of these two technologies offers the potential for an impressive array of new customer services. However, the blending of these two technologies has also blurred the boundaries between a traditionally regulated industry–communications–and the unregulated data-processing industry.

The combination of all these factors has led to a rethinking of public policies on telecommunications. These changes will require some changes in the Bell System. But we can assure you that your telephone service will still be the best telecommunications system on earth.

Along with your local Bell telephone company, we'll be telling you about any changes as they occur. In ads like this.

In each of these ads you'll find a telephone number. That number is an important part of our "Let's Talk" program.

This program has been set up by the Bell System to help you understand exactly what the changes at the Bell System will mean for you right now. And in the future.

Call us. At 1 800 555-5000.

There'll be somebody to talk to. Somebody to help you. To answer your questions. To get you information.

So call us. **Let's talk.**

Bell System

By Alex Haley

Photographs by Jeanne Moutoussamy-Ashe

Sea Islanders, strong-willed survivors, face their uncertain future together

'Progress' in the name of development comes to Daufuskie Island, where people and land remain unchanged after several hundred years

"With just a weekend, we'll really have to hustle!" My friend Dr. J. Herman Blake was yelling to be heard over the engines of the powerboat we'd chartered to cross the choppy Intracoastal Waterway to reach the little-known South Carolina offshore island called Daufuskie. It was my first trip there, but it was Herman's umpteenth since the summer of 1967, when he first heard of a tightly clannish island community of around 75 residents, most of them blacks who were said to be of unmixed descent since slavery days, and who still routinely spoke the waning Gullah dialect.

A dedicated sociologist, Herman Blake had felt irresistibly drawn to the Daufuskie islanders from the beginning. At first he found them distantly polite—until they felt he was asking too many questions. Then, perceiving him as a meddling outsider, they shut themselves like so many clams.

Herman was so frustrated and yet challenged that finally, just to establish a beachhead, he sank his savings into a small home on the island. Today, after a dozen years of his spending as much free time as possible among them, the Daufuskians have come to trust, even to love, the chunky, black, bearded scholar whom they call " 'Fesser," with few of them actually comprehending that he is Provost of Oakes College at the University of California, Santa Cruz.

My sharing this trip with Herman stemmed from yet another friend's deep devotion to Daufuskie. A few years ago while vacationing in the area with her husband, tennis star Arthur Ashe, photographer Jeanne Moutoussamy-Ashe heard that developers had recently bloc-purchased nearly one-half of Daufuskie. This was the last of the historic Sea Islands to remain as centuries of nature had created them. The developers' architects were already designing a plush resort along the lines of Hilton Head.

Since that time, Jeanne Moutoussamy-Ashe has traveled to Daufuskie as often as possible. Using her camera, she sought to preserve a historic small enclave of essentially naive, isolated people who had not yet fully realized that their island home—and also their personal lives and futures—would be altered forever. Jeanne's efforts resulted in an appealing chronicle, *Daufuskie Island: A Photographic Essay,* that the University of South Carolina Press is publishing this month. She asked me to write the foreword.

I soon found myself attracted to these people, also. I telephoned Herman and asked to join him on his next visit. I wanted to meet some of the islanders whose faces I kept remembering from Jeanne's photographs.

Daufuskie worshippers have been gathering for Sunday service at the Union Baptist Church for 100 years.

Daufuskie Islanders face uncertain future

A 98-year-old man has seen progress come to the Sea Islands, but his way of life is gone forever.

It is said that the best deviled crabs in the world come straight from the kitchens of Daufuskie women.

So, we flew from California and landed at the Savannah Airport. We rented a car, bought a weekend's supplies, and drove on to the Jenkins Island marina where we chartered *Harbor One*, a fast 34-foot sport fisher. Within 25 minutes her captain, Dick Hester, had us speeding through Calibogue Sound to Daufuskie.

As I looked toward the island, it seemed much bigger than its statistical five-mile length and two-mile width. The center was thickly wooded and the foreground trees were flecked white with resting herons. Here or there a dead, bare tree contained fish eagles (ospreys) resembling carved sentinels, perched high on limbs near their rough-twigged nests. Where the trees ended and the tall marsh grass began, a greenish expanse stretched on until it met Daufuskie's rocky shoreline where seabirds were hopping or walking delicately.

Back at the marina, Herman had telephoned an islander named Jake, who would be meeting us. When we arrived Jake was already waiting on the public dock, a tall, lean, dark-brown man whom I guessed was in his early sixties. Herman asked Jake, "Can you rent us a car?" Jake replied emphatically: "Mr. 'Fesser, just put one to good runnin' this morning!"

The three of us got into Jake's pickup and, on the way, he shared with Herman such news as who was ill,

Luvenia Robinson, "Miss Blossom," was one of the most popular islanders until her death last January.

or improving, or who'd had a domestic fracas. Jake was speaking slowly and carefully, I could tell, wanting to help me understand him. But even more intriguing was hearing Herman's talk now flavored with some of the Gullah dialect's odd tones, inflections and structures. Once, glancing at me deadpan, Herman said that with his house long closed, upon arriving we should "up all the windows." Another time he said that we'd best slow-cook our chicken as his crockpot "don't hot up the kitchen." Herman was putting me on, which he knew I knew, too.

Jake's yard contained about ten dilapidated cars, the sight of them moving Herman to mutter, "With any of those, we could wind up walking." Jake offered him a key for a Chevrolet, blandly explaining that both front doors were kept closed by two screwdrivers thrust through holes he had bored. Herman asked the weekend rental fee and Jake's expression was uncertain. "We 'scuss that later, 'Fesser." Herman got in and twisted the key. The engine whined, coughed, then it was running. "You know I wouldn't lead you wrong, Mr. 'Fesser!" Jake exulted.

The dirt road was narrow and it curved here and there as we made progress. Frequently the road intersected others—all of it through the consistently thick woods. It was difficult to even imagine condominiums and boutiques anywhere on this island. Now or then we'd come to a clearing and I'd recognize some building from Jeanne's photographs, which tickled Herman, who would fill me in on all the details.

We drove by the Mary Fields Elementary School, which had served black grammar-school children for generations. In 1969 the tiny white school closed and its remaining student was then integrated into the black school. At that time Miss Frances Jones, the island's black teacher for 39 years, was replaced by a young white man, Pat Conroy, whose first year evoked his book, *The Water Is Wide*, which later was made into the motion picture *Conrack*.

Abruptly, Herman braked to a stop. I saw a large doe about 100 yards up the road standing like a statue. Herman very slowly turned left at an intersection; at last sight, the doe hadn't moved.

When we entered Herman's house, the heat *was* so stifling that quickly we did "up all the windows," and the wafting breeze felt just great. I thought Herman

Alex Haley, author of Roots, *is currently at work on a book entitled* Henning, *an account of his teen-age years in Tennessee during the Thirties.*

Two sisters find their way along one of the narrow roads that pass through the thick woods on the island.

"Miss Blossom" is laid to rest in the black cemetery where for generations her family has been buried.

was testing the telephone when I realized he was talking with someone, exclaiming, "You can come right away? That's great!" He set the receiver down, grinning at me. "Man, you're going to start off meeting Thomas Stafford. *Nobody* can tell you better stories about what living on this island used to be."

I put away our supplies. Herman went to check out things upstairs and down. All that he found amiss was a leaking hot-water pipe responsible for a considerable pool under the bathtub. Shutting off the main valve meant cold showers for us, but we laughed that we'd probably survive.

Then, with a notebook and pencil, Herman began projecting our itinerary for the next day. I wanted to satisfy my curiosity: I opened the box of .38-caliber "shot" shells that Herman had bought in a sporting-goods store. I hadn't known of pistol cartridges loaded with buckshot. I remembered the salesman's chuckling, "Snake shells, right?" Herman had nodded, laughing, and casually the salesman said, "Yeah, killed three copperheads last week in my front yard." I reflected that it was likely the salesman lived somewhere not so surrounded by thick woods and underbrush as was Herman's place. It seemed something to think about as dusk started to gather on isolated Daufuskie.

Herman and I both hurried onto the front porch when we heard Thomas Stafford's car. He was a tall gangling man, and right away he held for me the natural and easy manner of a raconteur. After greetings all around, he sat down, smiling widely as Herman poured us all a liberal glass of home-made peach wine.

Needing no coaxing, Stafford began by saying that he had been born in 1921 on Bull Island, and was 15 when his father moved their family to Daufuskie, "back when Hilton Head was jus' same as here, nothin' but sand roads an' mosquitoes an' snakes, an' nobody even thinkin' 'bout no 'lectric lights."

He stretched and made himself more comfortable. "Near 'bout everything our family eat, we either farmed it or caught it. Our daddy didn't store-buy hardly nothin' ceptin' sugar, coffee an' black pepper, an' we coulda even done without them.

"Hell, man, raised our own taters, rice an' corn, plus our chickens, cows, an' hogs. Be so much meat hangin', drippin' grease in our smokehouse, the dirt floor be all greasy, you know? An' we kids pick

them oysters an' sell all we can pick, ten cents a bushel, an' give your folks a nickel an' you keep one out of that."

Thoughtfully sipping his wine, Stafford spoke next almost wistfully. "Whole lotsa things was wrong back in them days, I know that, jus' like still whole lot's wrong right today. But, in some ways, I declare we had some good days back yonder, yeah, lotsa ways."

His eyes fairly shone. "Like them good ol' Saturday night music an' dancin' parties! Work in the field 'til 'bout three, go home an' clean up, an' get to whosever's house got the party. Be already in there a ol' lady playin' a washboard, right 'longside a fella sound like he beatin' the bottom outa a washtub. 'Nother fella blowin' a mouth organ so hard it start squealin' 'cause some its insides bust an' he jus' grab outa his pocket a new one. An' we had this one little bugger jus' whistle with his mouth like a piccolo sound, an' be somebody else hitting two pans together, 'nother'n beatin' two sticks 'gainst a wall where won't be no paint left next mornin'. They all get to goin' together, Great God in Zion, man! I been in such a music an' dancin' party that house's floor pop loose under us! An' we all jus' run to 'nother house an' made it shake!

Grabbing that 90-year-old ankle

"Sometime the dancin' be after what we call a 'Leg Party.' All the mens, ol' an' young, in a room with big table full of treatin' plates, a apple, a pigfoot an' a slice of cake cost 15 cent. Now the next room be full of womens, separated from us at the door by a long, thick curtain, maybe a blanket.

"Now, the rules was three, four womens at the time stick out one leg an' foot below that curtain, with all 'em wearin' the same color ol' thick cotton stockin's. An' every man got to bend down, lookin' an' guessin' hard as he can, 'cause pretty young gals back in there, same as plenty they mamas an' them ol' gran'mas, too. Oh, Lord, how you hopin' you can guess a leg of somethin' nice an' fine 'stead of somebody's gran'ma.

"But all you can do finally is decide which one them three, four ankles just to go 'head an' grab an' squeeze —an' then, Lordy, whoever's hooked onto that ankle, well, out she come, walkin' before everybody! An', buddy, you grabbed somebody's 90-year-ol' ankle? That's jus' what you got. An' everybody includin' her is fallin' out laughin'. An' rules say you got to buy her one them 15-cent apple an' cake an' pig-foot plates.

"Man, you hear what I'm talkin' 'bout? I tell you us folks had us some good ol' times here on this 'Fuskie!"

Stafford sat silent for a moment. " 'Course wasn't jus' all the time havin' fun, though. Take f'rinstance them all-night church meetin's. 'Round 7:30 bell start ringin', and all us jus' pack in that church house. Sometimes the whole night through, we sing an' sing one song to the next. Singin', drinkin' coffee an' eatin' Uneeda Biscuit. An' you want to know a 'culiar thing? Be all night like that in church, then work all next day, somehow or 'nother you wouldn't even feel tired."

The veteran islander seemed transported back into those memoried times. I knew that Herman was sharing my sense of privileged, dimensional insights into a long-gone Daufuskie. For some reason, I remembered having written how a Hilton Head native black named Emory Campbell had told Jeanne Moutoussamy-Ashe that he knew no words to describe how he felt returning to visit old boyhood playmates. Simply to enter the resort area he had to pay a $3 fee—to walk on the ground where he was born and reared.

When Thomas Stafford left, by some unexpressed agreement, it seemed Herman and I had little to say. I believe we both felt overwhelmed. I know that later, lying abed, thinking about it all, I felt a vague gladness before sleep finally approached.

I awakened to hear Herman talking in the kitchen to someone who was gone by the time I got there. Herman held a tin pan containing a dozen brown eggs. "Cleveland Bryan, fascinating fellow. Can you even believe somebody retired from the New York Police Department bringing you eggs?"

We ate two apiece, scrambled, with cantaloupe, toast and coffee. Herman reviewed our itinerary and said we'd start at the island's co-op store. A short walk up from the dock, it provides the island-bound residents with essential staples. The manager, Mrs. Ella Mae Stevens, said that her steady biggest sellers are beer, grits, rice, Uneeda Biscuits and Ritz crackers—the latter two because crushed crackers are vital deviled-crab ingredients. The co-op's 37 members meet once a month, she said, exploring better services for custom-

A shrimper pulls in his line early in the morning, hoping to make a large catch to sell on the mainland.

ers and promoting community pride. The pride obviously included one co-op wall display: a veritable photographic gallery of Daufuskians and tourists. Another wall was devoted exclusively to the large prints of Jeanne Moutoussamy-Ashe.

Hearing activity outside, I looked through the co-op's screen door and saw a boatload of tourists walking up from the dock. Daufuskians with sundry small items to sell quickly assumed miens and postures of "colorful natives," obviously as bait to loosen the spending impulses of the tourists who, gulping that bait, were smiling at Daufuskians benevolently and exchanging amused comments. I found equally amusing the "colorful natives" exchanging in whispered Gullah their own comments about the sizes, shapes, looks and likely mentalities of the tourists.

The tourists soon focused on the pavilion adjoining the co-op, which offered Daufuskie's widely known deviled crabs with turnip greens, corn bread and potato-pie dessert.

Behind the sightseers had come Mark Maurer, the boat's young captain. Mark has a B.A. in music from Florida State University, but following graduation he experienced a magnetic tugging back toward his boyhood love, his father's tour boat. Mark won his captain's license, and has since happily carried 30 to 40 visitors daily from Hilton Head on his Daufuskie Island Adventure tour. The 45-minute crossing of Calibogue Sound is enlivened by young Maurer's own narrative about both islands' history and lore. I found especially fascinating his variation on the familiar old-Indian-word claim of how Daufuskie Island came to be so named.

Maurer said it was simple: "In the Gullah dialect, every island is called a 'key'; so it was only natural that looking at the first island north of the Savannah River they labeled it *'Da fus key.'* "

Jake skillfully guides his boat close to shore, but his real talent is rehabilitating dilapidated old cars.

After Maurer had shepherded his day's flock back to his boat and shoved off, Herman called to me. He stood talking with two young adult Daufuskians who I knew symbolized his greatest concern about the island, that the average young residents have little motivation to pursue an education beyond high school —if indeed they go that far. When youngsters finish the eighth grade, they usually transfer to high school on the mainland, where they live with families to whom the county pays $75 per month.

"That's where they start dropping out," said Herman. "They've usually entered with such low skill levels, and they find the going so tough, they just decide 'the hell with it.' "

Development means jobs for everybody

At a table within the pavilion, I ordered a bottled soft drink for Alfred Smith, 26, Linda Marie Robinson, 21, and myself. Herman had gone to the co-op. Primed by him, they needed no prompting. They said all younger Daufuskians wish that their island could remain as it is, but "a rich white folks' resort" would mean plenty of regular jobs for everybody, especially in construction, domestic housework and child-tending. In the back of my head, I was hearing Herman's answer when I'd asked him once what he would do if he were to spend five years on Daufuskie. He'd said, "Well, first thing, every way I could, I'd try to open young vistas."

It is momentous for Daufuskie if one of its own finishes college. Everywhere I went with Herman he was praised roundly for his role in young Ervin Simmons' four years at Oakes College. As we drove away from the co-op I was anxious to know what it took for Simmons to graduate. "His persistence and determination mostly," said Herman. After high school, Simmons had done poorly as a Shaw University freshman, and returned to Daufuskie. He had awaited the next arrival of 'Fesser and presented himself and his records, and asked for advice.

"At least I knew he came from a real solid, good, hard-working family," Herman recalled, "and I felt I was looking at a quiet, clean-cut kid—but his records!" Herman groaned. Only because the University of California system then authorized a "special action" waiving normal entrance requirements for a few new students did Herman manage to enroll Simmons in January 1977.

"He had a *very* hard time, the first two years," recalled Herman. His teachers told me, 'He's just uneducated in how to study and learn; he needs wall-to-wall tutoring.' Then those same teachers would volunteer. Every one of them I told, 'Help him, yes—just never even think of passing him until, on his own,

Miss Frances Jones, walking home from church with her dogs, taught at the black school for 39 years.

he meets your standards.' And he never complained, not one single time; he just did it.

"Well, we finally gambled, sent him off alone to a special program in public policy at Berkeley. Not only did Ervin do well, he came back telling everybody he was determined to pursue graduate work. Man, right in my office, we had a little celebration!"

Slowing the car to a stop, Herman said he felt that the people I'd meet shortly represented the most poignant example he knew of how older Southern blacks became separated from land that had been owned by generations of their families.

Leaving the car, we walked toward a house and from Herman's mouth suddenly came a piercing whistle. A window curtain parted and a male voice hollered, "It's 'Fesser!" Amid the warm introductions, Herman told me that Hamp and Miss Edna Bryan had lived in that house for 42 years. "Now 43, right on this here spot of ground," corrected Miss Edna (who recently passed away).

When Hamp's parents died, his share of land inheritance was a choice ten-acre knoll overlooking Calibogue Sound. But he and Miss Edna, retired and living comfortably where they were, decided they'd best just let the inherited property sit. Then, around 1974, a mainland white woman appeared, telling people that she had paid $9,000 per acre for the knoll. During Hamp's young manhood, all Daufuskians knew he "took no mess from nobody." His attorney assured Hamp that the woman had no real claim. But on three court dates, the judge put the case off. At last, when the judge dismissed the woman's case, Hamp's bill from his lawyer was more than $3,000. Taking money from his modest savings, he paid, furious and disgusted. In a thundercloud mood, when a white man offered $3,500 an acre for the knoll, Hamp snapped, "Take it all ten and gone! Too much trouble!" Today, it's said, the waterfront lots are offered at $90,000, and the interior lots at $30,000.

Farther along the same road, Herman's "Whooo-ee!" brought rushing out onto the front porch a giggling covey of four or five young children followed by small, gray-haired Josephus Robinson, whose face lighted with pleasure as he greeted Herman. " 'Fesser, I do believe you gon' get ol' enough to see me hit 81 next Christmas Day!"

Herman had told me en route that, following decades of a warmly companionable home life, last January saw the death of Robinson's wife, Luvenia, whom all Daufuskians loved as "Miss Blossom." The next half hour of spirited conversation had lasted nowhere near long enough when Herman, standing up, said that we really had to move along, naming others he wanted me to meet. "Guess I try to understand, 'Fesser, but just seem you don't never stay no time with us 'Fuskie folk like you used to." The downcast Robinson then kissed Herman on both cheeks and shook my hand. I really wished we could have visited longer,

especially when I noticed that an embarrassed Herman was brushing some tears away. He turned the key in the ignition saying, "You've got to meet Miss Blossom."

Her gravesite was the most recent in the black cemetery. I moved slowly about, feeling that subdued way one tends to within cemeteries. I told Herman the headstones seemed superior to many I'd seen in more affluent black cemeteries. He smiled and mimicked black 'Fuskie idiom and perspective: "Well, how come of that is all yo' days you ain't had much, leas' you gets buried bes' you can."

Herman had spoken several times of centuries-old remnants of slave cabins, but they were on acreage the developers now owned. With little daylight left we decided to drive by the area. But then, at the fenced entrance, a sign warned of prosecution for trespassing, and Herman and I reacted identically. *Trespass*? We went on inside and walked among the eroded remnants of a wall that ancestral slaves had built, using a durable antebellum material made of oystershells, lime and water called "tabby."

It is naive to think that any reasonably accessible littoral land in this country won't eventually yield to "progress" involving some sort of development. That's the physical aspect. But from the human point of view, as many another community has experienced, the future of 'Fuskie's folks will hold traumas inherent in the alteration of their traditional way of life.

Will the gains outweigh the losses? My ambivalence is realistic: yes and no. For there is no question, a new resort on the island will create steady jobs, provide far better on-island health services and improve mainland-linking transportation. All of these heighten the potential for "widened vistas" for younger islanders. Indeed, one day could even bring a Daufuskie High School, as there is now one on Hilton Head. But the change is metaphysical: for everything gained, something is lost. And the traditional way of life of the people on this island will be lost forever.

On Sunday morning Herman and I attended services at the Union Baptist Church where Mrs. Maybelle Jenkins was leading the congregation's singing of "Get Right with God." Seated in the pulpit area facing us were Deacon Johnny Hamilton and a dark-suited white man whom I knew as a Wycliffe Bible translator, Claude Sharpe. I had been told that he and his wife were on the island collecting authentic examples of the Gullah dialect. The song ended. Then Deacon Hamilton kneeled and prayed in pure Gullah, and when he finished Herman startled me by leading off the next song, "If it ain't but a little while, Lord, come by here/ Come by here, mu Lawdy/ Come by here. . . ." Deacon Hamilton had begun fanning himself with an occasional fervent "Yayman!"

Eventually Herman stood, expressing our pleasure at being among them, and then, "As most of you know, Ervin Simmons, one of your own, will graduate from Oakes College in California next week, with a B.A. in sociology. You birthed him, raised him, nurtured him here on this island, and sent him along his way. He will be coming back, but first, during this summer, Ervin will be in a program at the Harvard University Kennedy School of Government. Then he will enter a masters-degree program in public administration at Duke University." "*Yayman!*" came the response.

Then Herman said that I needed no introduction. I stood and said I had been sitting there reflecting about how I also grew up going to a very small and simple church called New Hope CME in Henning, Tennessee. I have never since doubted that its influence was one of the greatest things that ever happened in my life, so I felt privileged that Sunday morning to be among them.

Then Deacon Hamilton thanked Herman and me. The collection plate was passed, the benediction was given, and everyone in the church moved about smiling and shaking hands with everyone else. I seized my chance to ask Mr. and Mrs. Sharpe if they would let me have an example of Biblical verse in Gullah. They demurred. Although they are Wycliffe Bible translators, rather than translate Gullah they collect the authentic dialect from those who speak it. I said I understood. Then they gave me the Gullah way in which 'Fuskie folks would speak the fourth verse of the Twenty-third Psalm: "Eben do a wak tru de daak walley ob de shada ob det, a yent scayd, cuz oona da stay 'long me."

The future of this young Daufuskian looks bright,
but it will not come without cost—the loss of a heritage.

THE MOST RESPONSIVE CONTINENTAL EVER ENGINEERED IS THE FINEST RIDING CONTINENTAL EVER MADE.

The trim Continental.
Engineered to respond quickly.
In handling. In maneuverability.
In braking. And yet,
with all of that, to respond
with the finest ride of any
Continental ever.

But equally important,
Continental responds to you
in another way. To your demand
for quality. It responds
with something called the
Lincoln Commitment.
A commitment to absolute owner
satisfaction. A promise of
preferential treatment.
And a guarantee that
your opinions will be heard.

The Lincoln Commitment.
It means we'll do everything
possible to respond.
Every possible way.

Get it together–buckle up.

1983 CONTINENTAL

LINCOLN-MERCURY DIVISION Ford

Valentino Designer Edition

By Richard Evans Schultes and William A. Davis

Glass flowers bloom forever in unique Harvard collection

Over 40 years, a father and son in Dresden created thousands of lifelike models that are complete to the most astonishing detail

One day in 1886 an American professor set out from his hotel in Dresden to meet with Leopold and Rudolf Blaschka, father-and-son partners in glass artisanship, who for some years had been producing glass models of marine invertebrates for museums all over the world. The first director of the Botanical Museum at Harvard, Dr. George Lincoln Goodale, hoped to persuade the Blaschkas to create botanical specimens in glass for its exhibits. He hesitated to use dried or preserved plants, wanting instead something that would convey the beauty and vitality of the plant kingdom.

At first the Blaschkas were reluctant. They had developed, over the years, an appreciative market for their models of marine life, which provided them with a satisfactory livelihood. In addition, the father, some years earlier, had encountered unexpected difficulties with glass models of plants that he had made merely for his own satisfaction. After a lengthy discussion, however, Goodale persuaded the two artists to agree to fashion a few glass models of plants for Harvard.

Although the first few models sent by the Blaschkas were badly damaged while passing through customs in New York, their excellence was such that all who saw them were convinced of the feasibility of this medium. Several Boston residents, notably Elizabeth C. Ware

Almost indistinguishable from their real counterparts, glass meadow lilies would look at home in the wild.

A member of the mint family valued as bedding plant, the gentian sage is native to the mountains of Mexico.

and her daughter, Mary Lee Ware, were struck by the beauty and excellence of the artistry and workmanship. They urged Dr. Goodale to secure a contract with the Blaschkas, offering to finance the project. The Blaschkas agreed to produce plant models for Harvard on a half-time basis, devoting the other half of their time to marine invertebrates.

It was thought desirable to represent as many orders, genera and species as possible. Toward this end particular plants were chosen, and the list was sent to the Blaschkas, who used it to plan the sequence of their productions.

Some of the plants on the list were sent from America to Germany to be cultivated by the Blaschkas in their own garden and used as basic references in their work. Many of the exotic plants—particularly the tropical species—were in the royal gardens and greenhouses of the castle in nearby Pillnitz, and were made available to them for study.

In April 1887 the first shipment of 20 models arrived in New York. To avoid the earlier unhappy accident, prior arrangements had been made with the customs office to take the shipment directly to Cambridge, where it would be opened carefully by museum personnel in the presence of a customs official.

By 1890, while still producing plant models on a half-time basis, the Blaschkas decided that they wanted to work only with botanical models or with zoological models, but not with both. On April 16 of that same year they signed a contract with Dr. Goodale, who acted on behalf of Elizabeth C. and Mary Lee Ware.

As their work progressed, it became necessary for the Blaschkas to examine certain tropical plants under more natural conditions. So in 1892 the younger Blaschka traveled to the Caribbean and also visited various areas of the United States, where he studied the plants of these regions, made drawings and color notes, and collected and preserved specimens to take back to the workshop in Germany for future reference. Rudolf's second field trip to America in 1895 was curtailed by the death of his father. He returned to Germany to continue this monumental project alone, a project that his father had characterized as "a first class unicum [a thing unique of its kind]." In 1936, because of old age, Rudolf Blaschka retired.

When visitors to the museum see the delicacy of the glass flowers, they often ask how the models could possibly have been safely transported to their present location, especially from as far away as Germany.

The Blaschkas had had years of practice in the packing of delicate objects through their previous experience in shipping glass models and they applied the same highly successful methods to the glass flowers.

The finished model would be mounted on firm cardboard, with strong wire securing it. The mounted specimen was then placed in a sturdy cardboard box.

Tissue paper was used to cushion it and keep the parts that could not readily be wired from moving. Two samples of this preparation-for-shipping technique are still on exhibit in the museum.

Next, the cardboard box would be covered; and, when a number of such boxes were ready, they were all placed in a very large, sturdy wooden box with a sufficient amount of straw padding to keep the individual boxes from touching one another or the walls of the wooden box. The wooden cover was then screwed on, and the box was embedded in more straw padding before being wrapped in burlap. The finished bale, which was nearly the height of a person, was then sent to a seaport, loaded onto a ship, and transported to America. Here, the packing procedure was reversed, much care being taken in the final process of removing the models from their cardboard boxes.

Stories about a secret process involved in making the glass flowers have been circulating for as long as the models have been around. As early as 1889, in a letter to Miss Ware, Professor Goodale recounted various remarks made to him by the elder Blaschka as he watched the artists create the bouquet later presented to the Wares. Among other things, Leopold said:

> Many people think that we have some secret apparatus by which we can squeeze glass suddenly into these forms, but it is not so. We have tact. My son Rudolf has more than I have, because he is my son, and tact increases in every generation. The only way to become a glass modeler of skill, I have often said to people, is to get a good great-grandfather who loved glass; then he is to have a son with tastes; he is to be your grandfather. He in turn will have a son who must, as your father, be passionately fond of glass. You, as his son, can then try your hand, and it is your own fault if you do not succeed. But, if you do not have such ancestors, it is not your fault. My grandfather was the most widely known glassworker in Bohemia, and he lived to be 83 years of age. My father was about as old, and Rudolf hopes my hand will be steady for many years yet. I am now between 60 and 70 and very young; am I not, Rudolf?

No secret process ever went into the manufacture of the models. All the techniques employed were known to glassworkers of the period. The only difference was the combination in one individual of the meticulous skill, unmatched patience, accurate observation, and deep love of the subject that the two Blaschkas brought to all of their work.

The Ware Collection contains approximately 850 life-size models representing some 780 species and varieties of plants in 164 families, with more than 3,000 detailed models of enlarged flowers and anatomical sections of various floral and vegetative parts of the plants. There are also three special exhibits: a large and select group of the lower plants or cryptogams,

A glass insect visits a glass flower, here a member of the evening primrose family, *Lopezia coronata.*

The glass artisans who made these red maple leaves said no secret process was involved, just "tact."

illustrating the complex life histories of fungi, bryophytes and ferns; a group of some 64 models, showing fungal diseases of fruits of the Rosaceae (apple, pear, and so forth); and, perhaps most striking of all, several exhibits of plants and insects fashioned in glass representing the different processes of pollinization.

Although the models are made almost entirely of glass, certain other materials figured in their creation. In some of the plant models, wire, in a variety of weights and compositions, was used to strengthen them; without the wire, models with hanging fruits or other heavy structures would have been likely to break.

We also know from existing letters that, in some cases, clear glass was used to create a desired shape; in other cases, colored glass was used. When colored glass was employed, it was formed into the needed shape and considered finished; nothing was added to it.

When clear glass was used, it was also formed into the desired shape. To complete the work, however, color had to be applied to the surface to simulate the appearance of the original plant.

All the plant models and marine invertebrates that the father and son produced together before 1895, the year of the father's death, were painted. Undoubtedly, many of the models that Rudolf subsequently produced by himself between 1895 and 1900 were also finished by this method, which he refers to in some of his letters as "cold painting." We do not know just when he contemplated the possibility of improving the finishing process for the models, but it must have been in the late 1890s or early 1900s.

Mary Lee Ware wrote to Professor Oakes Ames, the second director of the Botanical Museum, on the occasion of her visit to the Blaschka studio on October 3, 1928, mentioning that it had been 20 years since she had last visited the Blaschka home. Speaking of various fruit models that Rudolf had completed, she said, "One change in the character of his work and, consequently in the time necessary to accomplish results since I was last here, is very noteworthy. At that time [in the first decade of the 20th century], he bought most of his glass and was just beginning to make some, and his finish was in paint. Now he himself makes a large part of the glass and all the enamels, which he powders to use as paint." In this letter she also relates how a leaf was made, explaining that powdered glass of the proper color was applied to the surface, then heated in the flame to fuse the powdered glass to the leaf surface, thereby achieving a product that would remain unchanged.

This article is adapted from the book, The Glass Flowers at Harvard, *by Richard Evans Schultes and William A. Davis, with photographs by Hillel Burger, to be published this month by E. P. Dutton, Inc.*

A few samples of the materials used to simulate the surface colors of some of the earlier models have been subjected to preliminary analysis: they seem to consist of a gum or glue, or combination of both, plus mineral pigments. This material seems to respond to variations in humidity. When the humidity is high, it remains unaffected; but when the humidity falls, it becomes distorted and pulls away from the glass surface; and in some cases, it pulls fragments of glass from the underlying surface. It is possible that this movement of the coating material may be due partly to age; we simply do not know. It remains one of the mysteries yet to be solved.

The surface of some of the plant models seems unchanged. Occasionally, however, the shiny glass can be seen under an area of the applied material that has suffered from low humidity. More frequently, especially in many of the enlarged cross sections, the coating material has pulled away from the surface. As models are regularly subjected to fluctuations in humidity, the separation of this material will continue and, in time, the material will become completely detached from the underlying glass. In some of the cross sections of ovaries, for example, the material is already totally separated.

Although this condition is not reversible, it can be stabilized. To halt such disintegration, the whole collection should be housed in an environment that provides constant temperature-and-humidity control. In the mid-1970s an attempt was made to raise funds to air-condition the halls where the collection is housed, but the campaign has not yet reached its goal.

Incredible detail of some models, such as flowering goldenrod, could be damaged by low humidity.

Glass flowers on the road, at home and abroad

Because the glass flowers were made for Harvard, the whole collection is housed at the university. On a number of occasions, however, a few of the plant models have been exhibited elsewhere. Some were shown in Paris in 1900, but our information on this event is very sketchy. A few were put on temporary exhibit at the World's Columbian Exposition in Chicago in 1893, and six models went to the Louisiana Purchase Exposition in St. Louis in 1904.

In 1959 Professor Paul C. Mangelsdorf, third director of the Botanical Museum, sent six glass flowers on loan to the Corning Glass Museum in Corning, New York. Much of this museum and all six of the glass flowers were ruined in a disastrous flood in 1972. One additional model has since been lent to the new Corning Museum and is now on exhibit there.

More recently, in 1974, the fourth director of the Botanical Museum, Professor Richard Evans Schultes, sent three models to Tokyo as part of a temporary exhibit of Harvardiana that was held at the Isetan De-

Father, son began career with marine invertebrates, but easily switched to subjects like strawberries.

partment Store. As transportation has changed radically since the days of steamship travel, they were taken by plane to Japan by their present curator, William A. Davis. "Mr. Box" (the name given to the case in which the models were packed) had a seat in the first-class section—complete with seat belt and additional web belting for security—with Davis right beside.

Two years later 25 models were destined to make a much more difficult, albeit much shorter, trip. In early 1976 the Steuben Glass Company arranged for a special month-long exhibit of these glass flowers in their showrooms on Fifth Avenue in New York. Again it was left to Davis to supervise the meticulous packing and accompany the models.

The flowers, packed in wooden cases similar to those used for the trip to Japan, were to be flown from Boston to New York in a small plane. But the question of how they could safely be transported over the icy potholed streets to Logan Airport in Boston and from LaGuardia to Manhattan remained. What type of automobile had the best springs to give the smoothest ride? Although the obvious solution was the use of a limousine, test runs indicated a hearse to be even better. So, one afternoon in March, two large black hearses, each with a driver in funeral dress, backed up to the doors of the museum, and the boxes were loaded. The automobiles proved to be such a perfect answer that, after a well-attended month-long showing, the models were not returned by air as planned, but were instead driven the 200 precarious miles back to Cambridge in two hearses.

The Ware Collection of Glass Models of Plants is housed in two rooms on the third floor of the Botanical Museum of Harvard. The glass flowers are used primarily as teaching tools in the plant sciences. The university does not maintain extensive greenhouses for this purpose. If it did have such facilities, their value in teaching botany would be rather limited, because real plants flower for only a short period of time and only in season. The glass flowers, on the other hand, in addition to being stunningly accurate to the smallest detail, are in flower all year round and consequently make superb teaching tools.

Over the years this collection has become a mecca for tourists, plant lovers, garden clubs, and many others. In fact, the glass flowers constitute the largest single public attraction at Harvard. More than 100,000 visitors a year come to see the flowers that have been aptly described as "an artistic marvel in the field of science and a scientific marvel in the field of art."

A native of Mexico widely used in garden borders, *Echeveria secunda* produces chains of blossoms.

Here is only part of a glass model of some mountain laurel, springtime glory of the northeastern states.

One Stamford Forum, Stamford, Conn. 06904

"Improving telecommunications all over the world? GEE!"

(No, GTE!)

At an oil camp on a wind-whipped island off the tip of South America, a GTE digital switching system links the camp with the outside world.

Along a 6½-mile route between Brussels and the nearby city of Vilvoorde, a GTE optical communications system carries hundreds of telephone calls at once on high-speed pulses of light.

We brought solar telecommunications to the jungles of Colombia. Microwave telecommunications to Mexico and Spain. And satellite telecommunications to such countries as China and Italy.

We provide telecommunications for countries—like Algeria and Venezuela. Or just cities, if need be—like Vancouver, B.C., and Honolulu, Hawaii.

There's hardly a part of the globe that isn't affected, in one way or another, by GTE. Of course, the degree of involvement may vary. But, as far as we're concerned, the degree of importance is always the same.

GTE

Private collection; courtesy Andrew Crispo Gallery, New York

By Robert Wernick

A quiet American painter whose art is now being heard

© Arnold Newman

The artist posed for this portrait in his apartment, before his *Dunes and Sea II*, in 1961. He died in 1965.

Working with remarkable dedication, though virtually unnoticed during most of his life, Milton Avery is revealed as the master he was

Modern art has always liked to speak in a strident voice, and modern American art in particular has sounded its cry over the rooftops of the world. Now that the heroic days are over and many of the giants of modernism have passed into death or decrepitude, some quieter voices are being heard more clearly.

No painter was ever quieter than Milton Avery, who died 17 years ago, loved, admired and imitated by his peers but comparatively unknown to the general public. In the inevitable recasting and revising of reputations that is part of the history of esthetic taste, his fame has risen steadily; and a major retrospective show at the Whitney Museum of American Art in New York (September 16-December 5) is demonstrating why the unassuming work of this quiet but masterful man has come to rank with the major artistic achievements of his time. The exhibition will also be seen at the Carnegie Institute Museum of Art, Pittsburgh (January 15-March 6, 1983), Fort Worth Art Museum (March 22-May 8), Albright-Knox Art Gallery, Buffalo (May 21-July 10), Denver Art Museum (July 27-September 4), and Walker Art Center, Minneapolis (September 18-October 30).

Avery's career, like his talent, was quite individual, quite unlike that of anyone else on the scene. In a time of turbulence, continuous experiment, continuous change, he remained faithful to his own vision and his own way of doing things. He belonged to no school, took part in no controversy, did nothing to impose himself on the public, scraped on just above the poverty line for most of the years of his adult life, working away at the only thing that interested him, which was to record on canvas the harmonies of form and color he saw everywhere.

Wife, Sally, and daughter, March, were the subjects for Avery's *Mother and Child*, painted in 1944.

Nothing in his background predisposed him for a career in art, unless it was that his grandmother once painted china. He was born of old New England stock in upstate New York and grew up in Hartford, Connecticut. His father was a tanner, and he himself started work at 16, being successively aligner, assembler, latheman and mechanic in the local factories. He was willing and he was versatile. He grew up to be a model young Yankee workingman, thrifty, abstemious, reliable, devoted to his family, especially after a series of deaths left him the sole male in a household of nine adoring females—mother, sister, sister-in-law, nieces.

After his father's death in 1905, when his weekly paycheck was looking particularly skimpy, he saw an ad promising a bright future to young men who studied lettering. He promptly enrolled in a lettering class at a local art school. The class was discontinued after a month or so, but the teacher persuaded Avery to transfer to a class in life-drawing. He was to remain in art school, attending night classes after his eight-hour factory shifts, for something like 14 years.

Along with his friend Wallace Putnam, Avery got a job working the night shift as a file clerk for an insurance company, so that he could paint by daylight. Later they switched to making tires at a rubber-com-

Rhode Island School of Design, Albert Pilavin Collection

Avery's 1933 portrait of painter Mark Rothko serves as a tribute to the fast friendship between two artists.

pany plant, until the fateful summer of 1924 arrived.

Avery went to Gloucester for his vacation, painting seascapes in what had once been a sail loft on a pier. In another loft down the way were two girls from Brooklyn. One of them was Sally Michel, just out of high school and enamored of art, who got up at dawn every morning to go out sketching boats and gulls and waves with the same feverish regularity as Milton. He admired her zeal, but he kidded her one day when they met at the tip of the pier, "I am a woman-hater." "That's the kind that I make do somersaults," she responded in brash Brooklynese. He showed her one of his paintings, a head of a girl in yellows and blues. It showed her what painting was all about and set the course of both of their lives.

Robert Wernick lives alternately in Paris and Georgia and writes frequently for SMITHSONIAN. *He last wrote about Talleyrand in the November 1981 issue.*

He was in love and determined to pursue her. He saved up some nickels and dimes, and Wally Putnam sold a painting for $125, so with this capital they took a bus to Manhattan and found and rented a room on Eighth Avenue where they sweltered through the summer of 1925.

Avery tried to get a job drawing the heads of pretty girls for mail-order catalogs, a kind of assembly-line job since someone else would add the hands, furs or whatever. He never got it because he did not have the facile touch needed for this kind of work, but somehow he kept alive and proposed to Sally. Her family could not understand why, when all her cousins were seeing dentists and lawyers, she should be throwing herself away on a taciturn Gentile in a frayed jacket without a nickel in his pocket or any visible prospect of putting one there. She defied them all, and they were married in Brooklyn's Borough Hall and went right back to Gloucester to paint.

He was approximately twice her age, and perhaps to make things look more respectable he started about this time to lop eight years off his age, so that until the curator preparing this year's Whitney show got around to checking up, all the authorities—including the *New York Times* obituary—had him born in 1893.

This would have made him 40 years old at the start of his New York career, the most obscure and nondescript of provincials, whose name had never appeared in print except in an article Wally Putnam had written for a Hartford paper. No matter; both he and Sally were convinced that he had a great talent. On the rock of that belief they built a warm and enduring marriage. For Milton it meant moving from one set of adoring females (his mother died eight months after his marriage) to another (there was a daughter, March, born in 1932, who had a drawing pencil in her fist before she was out of the cradle), and in this cozy milieu he could devote all his time, undistracted and undisturbed, to his work. For Sally it meant putting all her verve and love of life and good practical sense into giving shape and order to her husband's career. When he was asked "Why do you paint?" he would answer, mostly in jest, "Because my wife makes me."

A painter's job is to paint

Sally would not hear of his taking a job, such as teaching in an art school, which she could see only as a devourer of time and talent. She could always make enough money doing line drawings for ads, later for a column on child care which ran every Sunday in the *New York Times Magazine*, to pay the rent on an apartment up- or downtown with a living room big enough to hold two easels. They could never afford a regular studio—nor did they have a separate room in

their apartment—until the last few years of Milton's life.

Avery never had any doubt about what he wanted to do. While the others were floundering from style to style, under the shock of revolutionary innovations from abroad, he kept on the same path he had marked out for himself from the time he picked up a brush. His techniques might change in the course of a half-century of search and experiment; his style, his vision, remained the same. The thick glossy layers of paint he had learned in art school to spread on his canvases with a palette knife changed to light washes put on thinly with brush or rag. Inventive shapes and unusual combinations and hues of color began to appear in his paintings after he became more familiar with the work of the great European modern masters in New York. But with few exceptions, his work shows a remarkable uniformity of tone, feeling, composition, atmosphere.

Excitement from the undramatic

In a burst of loquacity unusual for a man who liked to say, "Why talk when you can paint?" he tried to explain to an interviewer in 1951 what he had been aiming for all his life. "I work on two levels," he said. "I try to construct a picture in which shapes, spaces, colors, form a set of unique relationships, independent of any subject matter. At the same time I try to capture and translate the excitement and emotion aroused in me by the impact with the original idea."

The "original idea" was almost anything he laid eyes on in the course of a life remarkably devoid of dramatic incident: his wife and daughter at home, bathers at Coney Island, seagulls in Provincetown, cows in Connecticut, donkeys in Mexico, sand dunes, waves, pasture, sky. These images, never grandiose but never trivial either, light and airy and serene, were translated onto canvas in what came to be the unique Avery idiom. Objects and the spaces between objects became patches of thin luminous color. All the traditional devices which Western art has used to create the illusion of three-dimensional space on a flat surface were abandoned. There is no perspective, except now and then a couple of slanting lines to indicate an object is receding into the background. There is little contrast of light and dark. Forms are flattened, simplified, distorted at will. Colors are purely arbitrary—a face may be green, a sky purple, ears red. To someone who said to him once, "I never saw a blue tree in Vermont," Avery replied, "That picture was painted in New Hampshire."

In the New Hampshire of the mind where Avery lived, colors and shapes might mutate and migrate, but they had to remain true to his overall original vision. The human forms are sometimes little more than good-natured caricatures; in the later landscapes the forms are so generalized that it takes a long look, or a peek at the title, to figure out what the original subject matter was. But he never went over the cliff into pure abstraction. Avery's art was always firmly locked into the visible world he loved so well and looked so hard at.

His paintings might come out at a prodigious rate, one or two or even three a day, done with all the freshness and spontaneity of the watercolors from which they were so often derived. He never regarded himself as a fast painter, however. When he was asked how long it took him to do a painting, he said "Thirty years." Most of the work was done beforehand. By the time he was at the canvas, he knew exactly what he was going to do. Nat Halper, who was his dealer and neighbor at Provincetown for years, saw him working on scores of paintings, and never saw him displace more than a line or two, never modify a color.

His life ran on a smooth routine. The Averys rose early, breakfasted on Shredded Wheat, then worked at their easels until noon, when they lunched on peanut-butter sandwiches. Then perhaps a walk in the park, and more work until it was time for dinner, which was hamburger and baked potato. Recreation

Andrew Crispo Gallery, New York

Avery parodied himself in flux of art world of 1943. Names are of prominent art galleries of the time.

Collection of Thos. Marc Futter

Sea and Sand Dunes, 1955, depicts the artist's entrancement with the landscape of Cape Cod.

on weekends consisted of visits to the art galleries on Saturday afternoon; they also enjoyed going to vaudeville shows, prize fights and Coney Island. On Sundays they would often go up the Hudson to visit the Putnams at Yorktown Heights, where they could take their ease while the children and their dogs, Picasso and Matisse, could play together. Monday morning it was back to the easel. In summer they would get away to quite agreeable places—Gloucester, Canada's Gaspé Peninsula, Mexico, Provincetown. In 1952 he made his one and only trip to Europe. While Sally and March dutifully went through the museums and cathedrals, he sat outside sketching things that interested him, such as monks bicycling along the banks of the Loire.

The succession of Avery apartments on upper Broadway and in Greenwich Village were meeting places of the arts. Almost every night, after the easels had been taken down and the living room cleared of paintings—they would sometimes use the landing and staircase to store canvases—people would drop in.

These visitors included many of the talented painters in New York. There were aspiring youngsters like Marcus Rothkowitz, who later shortened his name to Mark Rothko, as well as distinguished older figures like Marsden Hartley (SMITHSONIAN, March 1980).

Everyone loved to hear Avery talk, except that he almost never talked. His communication, his daughter March says, was almost entirely nonverbal, though a lifelong reading of dictionaries provided him with a huge vocabulary that he never used. Wally Putnam, a close friend for 40 years, cannot remember anything resembling a conversation with him. "He talked with his brush," says Sally. He would come out every so often with a barb of dry New England wit, but most of the time in those evening sessions, while the visitors were passionately debating the future of art in America, Avery was seated in a corner sketching them. If they came to him with a work for comment or criticism, his general advice was, "Do it again." When they invited him to their shows, he had a Yankee-diplomat phrase ready for them. He would say, "You've got something there." And at the second show he would say, "Boy, you've done it again." Coming from him, it could be taken as a compliment.

The admiration of his peers was of course valuable, vital, to a relative newcomer to the field, especially a

National Museum of American Art, Smithsonian Institution

Avery was intrigued with idea of few forms, spare color range, as shown in lyrical *Spring Orchard,* 1959.

middle-aged newcomer. But the public recognition and the financial reward that should have gone with it were painfully lacking.

Everybody knew and liked Milton Avery, but who would write about him or buy him? In 1927, Henry McBride, the influential critic of the *New York Sun,* mentioned his name in a review of a show of independents, a show in which anyone who paid the modest initiation fee could have his work hung. Later the following year the painter Bernard Karfiol chose him among a group of unknowns for a show at the Opportunity Gallery. Wallace Putnam wrote a review of the show, mentioning Avery along with Rothko and Gottlieb. Putnam was working at that time as a commercial artist for the *Sun,* and one evening he asked McBride if he could use what he had written. McBride took the review and tacked it on to the end of his column. So the next day (November 17, 1928), the *Sun* hailed Avery, in words that might have been repeated throughout his career, as "one who has mastered his craft and has something of his own to express."

In the early 1930s, the dealer Valentine Dudensing began showing Averys, and one of them was bought by the irascible eccentric Dr. Alfred Barnes for his foundation in Merion, Pennsylvania. (It was a cast-off Wally Putnam work which Avery had painted over because he could not afford new canvas.) Other collectors with a good eye for the unexpected, like Joseph Hirshhorn, turned up—members of what the family called the millionaires' club.

But none of this translated into substantial hard cash. When Dudensing bought 50 works for $1,500, it looked like manna from heaven. The going price for a major Avery in the 1930s was $100, and Sally can remember how in the early 1940s she decided to leap to $200 for one work, and the syllable *two* stuck in her throat. (She has no difficulty now in pronouncing the asking price for one of the works she owns: $500,000.) When the Parisian dealer Paul Rosenberg came to New York during World War II and took Avery on, he agreed to purchase 25 to 50 paintings a year, which gave the painter a measure of security. But his fame was not secure for all that. Rosenberg had to bully the Whitney Museum into showing its first Avery by threatening not to sell them the other artists they wanted.

The trouble was that Avery, going his own way ("I

never have any rules to follow, I follow myself"), always managed to be out of tune with current fashion. In the 1930s, American art was oriented toward the depiction of contemporary life in a theatrical mode: nostalgic-patriotic for some, searingly and depressingly realistic for others. Avery's small canvases of domestic scenes or perfectly ordinary bits of landscape lacked the Message which was so important in that epoch. They were considered lightweight, extraneous, frivolous. How could a man who did portraits of himself with big red ears and the look on his face of an unabashed hick, how *could* he be considered important? Alongside the detailed observations and the biting social commentary of the painters in vogue, his works looked uncomfortably abstract, uncommitted, uninvolved in the great issues of life.

In the 1940s and 1950s, when American art took its great leap into gestural abstraction, when slash and splash and dash were the watchwords, there was Avery stubbornly going on painting recognizable sand dunes, birds, people.

The tastemakers were slow to appreciate him. Once Alfred H. Barr jr., director and guiding genius of the Museum of Modern Art, which for years was the judge of what was certifiably modern, asked Rothko to name the greatest living painters in America. When Rothko named Avery, Barr simply laughed. Clement Greenberg, whose position in the postwar abstract movement was rather like that of the College of Cardinals in the Roman Catholic Church, dismissed him in 1943 as "empty and sweet," on the order of the French painter Marie Laurencin. Fourteen years later Greenberg recanted, and hailed Avery as a modern master, a gesture which helped make the last years of his life much more comfortable from a material point of view.

If Avery was affected by talk about him, he never let on. In a time when theories of painting often assumed more importance than the paintings themselves, he remained interested only in the work at hand. He was elected president of the Federation of Modern Painters and Sculptors, but never attended a meeting. At The Club on Eighth Street, where all the luminaries of the postwar New York School used to thrash out the philosophy of art every Friday night, they often talked about the chromatic audacities of Avery; he went there just once, to see a 15-minute movie about himself.

Nothing, in fact, could make Avery deviate from the single, central activity of his life. "He was utterly dedicated to painting," says Wallace Putnam. A heart specialist told Sally that her husband lived on top of a raging fire, and underneath his bland, unruffled exterior there boiled all kinds of obsessions. When late in life the family had enough money to own a car, he would drive his beloved DeSoto out to see new landscapes in Mexico or the Canadian northwest. He went at top speed all the way, and once he got behind the wheel on a highway it took all the pleadings of his two nervous passengers to get him to stop at all. He liked to read aloud, and very well too; but, says March, he would have read *Moby Dick* through at a sitting if he hadn't been reminded it was bedtime.

It was this same kind of intense drive that directed his lifetime of looking and sketching and painting. Avery's works are all the fruit of devoted labor, the relentless effort to find just the right shape, the right curve, the right color.

His drive was inexhaustible. He never got tired of looking, or of loving what he looked at. He would often get up in the morning saying, "Gee, I don't know how to paint," and Sally would say firmly, "I have no intention of being married to a second-rate artist," and he would go out with his sketchpad and there was always something new to see. Unlike many of his younger admirers, he never fell into repetitive patterns. Up to the last gasping days after a crippling heart attack in 1960, he was always looking at the world with the fresh, inquisitive eyes of his youth. His last works are among his most daring, spare and ascetic, but somehow serene.

When he died, he was at least widely recognized, and his reputation has grown ever since, quietly. Mark Rothko, who owed so much to him, saluted him at his memorial service as a master who out of the "domestic, unheroic . . . casual, and transitory" elements of his daily life had created works which often achieved the "permanence and monumentality of Egypt."

Interest in relation of shape and color was apparent even in portraits such as *March in Brown*, 1954.

Collection of Mr. and Mrs. Philip G. Kavanaugh

The uneasy road of the great writer

Great writers may be born to be great writers, but that doesn't necessarily make it easy for them to make their way in the world.

First, someone has to discover them. Second, someone has to publish them, not once, but several times. Third, someone has to keep reminding them that they have something important on their minds and that there's a world out there waiting for them to put it on paper.

While some potentially great writers may succumb to the heartbreaks of rejection slips and resort to other ways of life as a result, others somehow summon the will to keep writing until someone gives them all the encouragement they need to go on.

The great writers of our time who have needed someone to urge them on include F. Scott Fitzgerald, Ernest Hemingway, Booth Tarkington, Robert Frost, Theodore Dreiser, Sherwood Anderson, Katherine Anne Porter, P.G. Wodehouse, Willa Cather, Robert Benchley, J.D. Salinger, Dorothy Parker, Alexander Woollcott, Robert Penn Warren, James Thurber, Ogden Nash, S.J. Perelman, Norman Mailer, John Updike, Tom Wolfe, Philip Roth, John Irving, Saul Bellow and E.L. Doctorow.

The someone that all of those writers needed and found was, in every case, a magazine, for it was a magazine that published their work when the going was toughest and then cajoled and pestered them for more.

We don't know of a higher compliment that can be paid to people who read magazines, because it is they who persuade our editors that the world is indeed ready for people who have it in them to write the literature of our age from *The Great Gatsby* to *Ragtime*.

The readers of magazines have, in other words, a unique kinship with their editors. They not only cast their votes for or against in the form of newsstand sales and subscription renewals, they write their editors to tell them, in no uncertain terms, what they like or dislike about individual writers.

From time to time, some of our readers will reject a new writer on first reading, only to write again to say how wrong they were.

In some instances, they may have reread the first work. In others, they may have read a second or third. But in any case, the importance of the writer—whoever he or she may be—has grown on them.

Whenever we receive such letters, they aren't tucked away in a file until many people have read them, for we not only live to open the eyes of our readers, we live to have them open ours.

Nothing opens your eyes like a magazine.

This message is one in a series from America's magazines.

© 1982 Magazine Publishers Association, Inc. 575 Lexington Avenue, New York, N.Y. 10022

If you're into labels,
only the best will do.

Canadian Club®

"The Best In The House"®

86.8 Proof. Blended Canadian Whisky. Imported in Bottle by Hiram Walker Importers Inc., Detroit, Mich. © 1982

High fly at twilight gives fielder Kelly a chance at a dramatic, game-saving—and phony—"catch."

By James A. Cox

When fans roared 'Slide, Kelly, slide!' at the old ball game

He was a scourge of umpires and a miscreant on the base paths, but no one ever played baseball with more verve—or more creativity

It's the 12th inning in Boston and the score is tied. The Beaneaters have the bases full, with two outs. Any kind of a hit will score a run and win the game. But twilight is slipping into darkness. And if Cap Anson's champion Chicago White Stockings can get that last out, the game will be called on account of darkness.

The Chicago pitcher goes into his windup. In the grandstand, the "kranks"— as baseball fans were called in the 1880s—lean forward and squint their eyes to see in the thickening dusk. Bat meets ball with a *crack*! A grayish blur rips on a line toward right field and disappears into the gloom. The Chicago right fielder—a fellow named Kelly—leaps high into the air, grabs with two hands, gives a great shout of exultation and trots off the field to the clubhouse.

"Three out!" cries the umpire. "Game called on account of darkness!" In the clubhouse, the White Stockings compliment Kelly on his catch. One of them asks where the ball is. "How the hell would I know?" he answers with a grin. "It went a mile over me head!"

Now it's the ninth inning in Chicago, Detroit at bat, two down, a runner at second, and the White Stockings ahead by a run. The Detroit batter slaps a shot up the alley in left. The base runner rounds third as the left fielder retrieves the ball. It will be a whisker-close play. But what's this? The Chicago catcher—Kelly

Illustrations by Brenda Losey

In his tall hat and high-button shoes, surrounded by "good companions," King Kel cut a dashing figure.

again—drops his glove and turns away from the plate, as if the outfielder has caught the ball for the third out. Taken in, the runner slows to a trot. Whereupon the devious catcher whips around, catches the incoming throw and slaps the ball on the runner for the out.

Chicago again, with Kelly, the White Stockings catcher, on the bench this day, nursing a monumental hangover. His team is ahead and needs one more out to clinch the victory. The St. Louis batter swings and squirts a low foul fly in the direction of the White Stockings bench. The substitute catcher starts after it but gives up—he hasn't a prayer of catching it. The lad with the headache leaps to his feet, shouts to the umpire, "Kelly now catching for Chicago!" and gathers the pop fly in. The St. Louis players scream and so does the outraged ump, but the grinning Kelly cites the rule book: a player can be substituted at any point in the game, simply by notifying the umpire. The play stands, the game is over—and shortly thereafter the rule book is changed.

We have just witnessed three highlights (if they can be called that) from the career of Michael J. (for Joseph) "King" Kelly, the most colorful, audacious, electrifying, daring, crafty and *creative* player ever to drive an umpire batty in baseball's formative years.

As Alfred P. Cappio points out in his monograph, "Slide, Kelly, Slide," it may be hard for those weaned on Frank Merriwell and Horatio Alger to believe, but Kelly—the antithesis of almost everything the moralistic writers of the Victorian age held up as the American ideal—was the greatest sports hero of his day. A darkly handsome, burly Irishman with thick hair, a fierce handlebar mustache and a wild, uninhibited personality, he was, writes one historian, "totally unfettered by English conceptions of good sportsmanship."

A monopoly on fans' hearts until the Babe

He was also a cigarette-smoking hot dog in pointy, high-button shoes who wore a tall hat tipped far enough over his eye so that any man would know at a glance that there was one hell of a fellow under it. Like so many star players of the early days, good times, good companions and good booze were the joys of his life—and there came a time when the booze didn't have to be good, it just had to be there.

But he was also so fun-loving and generous, so sunny of disposition, that he found it difficult to make and maintain enemies. Men and small boys rushed up to him on the street just to touch his hand. Kranks everywhere turned out in droves to see him play. Even people who knew little about baseball, and cared less, crowded into the ball park when "King Kel" came to town. He dominated baseball in the 1880s, and would continue to do so in legend until Babe Ruth, another swaggering hero—known as the "Sultan of Swat"—came along to capture the hearts of the fans.

Part of King Kel's attraction was based on possibilities. You never knew when he was going to pull another outrageous trick that would set the whole baseball world buzzing. And on the other hand there was certainty, certainty that when the King got on base, excitement would follow. Mike didn't invent the slide. Other players had flopped down on their bellies or backsides in attempting to elude a baseman's tag. But it was Kelly who developed sliding into a fine art, to the delight of Chicago fans and the frustration of opposing infielders.

There is a stirring in the grandstand as Kelly approaches the plate . . . a babble of excited conversation as he takes his place in the batter's box . . . a *whoosh* of pent-up breath as the big right-handed hitter swings mightily and misses for a strike . . . a howl of delight as he knocks the next pitch over second for a single . . . and now a roar of anticipation, for the King is on first and the next act in the drama is ready to unfold.

Every eye is on Kelly as he stands, a picture of

Why drive an ordinary wagon when you can drive the Ultimate Wagon?

Any similarity between the Jeep Wagoneer and a conventional two-wheel drive station wagon is purely coincidental.

Because no conventional full-size wagon gives you the

Wagoneer's four-wheel drive traction and security, together with Wagoneer's two-wheel drive economy... better EPA estimated MPG than any full-size two-wheel drive wagon.* Add to that the comfort and luxury you'd expect to find only in the plushest automobiles, and it's hard to call Wagoneer anything but *beautiful.*

Introducing Selec-Trac.

Now Wagoneer offers even more convenience: two-wheel drive or full-time four-wheel drive at your fingertips. No wheel hubs to adjust. And no need to leave the driver's seat. Just flick the dash-mounted Selec-Trac switch, and you're on your way.

Two-wheel drive for improved fuel economy. Four-wheel drive for sure traction in rain, sleet or snow, either on-road or off-road...even at faster highway speeds.

So why drive a conventional wagon when you can drive the Ultimate Wagon. Jeep Wagoneer Limited.

18 EST.* EPA MPG 23 HWY EST

Jeep Wagoneer Limited. The Ultimate Wagon.

AT AMERICAN MOTORS

*Use these figures for comparison. Your results may differ due to driving speed, weather conditions and trip length. Actual highway mileage lower.

Jeep Corporation, a subsidiary of American Motors Corporation.

studied casualness, on the base. No false starts, no jigging for him. Shoulders up, head back, a look of bland innocence on his face, he stares at the pitcher, who shows all the nervous signs of a man suddenly possessed of a case of the willies. Ten thousand throats create a waterfall of sound, half of them shouting at the pitcher to throw the ball, half of them beseeching the King to *GO*!

At last the ball spins toward the plate, and Kelly is off! The roar from the crowd is deafening. With fierce determination the catcher plucks the ball from his glove and hurls it to second. The shortstop spears the ball and turns grimly as Kelly thunders toward him. The kranks are on their feet, screaming the three words that have become the slogan of Chicago baseball: "Slide, Kelly, slide! Oh, slide, Kelly, S-L-I-D-E!" And Kelly does just that. Suddenly his body drops and a cloud of dust roils toward the base. The shortstop lunges. But Kelly's body isn't where it should be—it's off to the side—and his toe has hooked a corner of the bag. "Safe!" cries the umpire and the crowd cheers.

We call it the "hook" slide today, and even Little Leaguers know how to do it. Back then it was dubbed the "Chicago" slide, and the infielders sweated for months before they figured out how to handle it. And by that time the inventive King Kel had added some refinements, like sliding wide and late, and catching the bag with his hand when he went by. Or piling right into the baseman, feet jabbing his defenseless victim like a boxer's fists.

On one such occasion, Kelly roared into second, feet flying. "You're out!" shouted the umpire. Mike reached under his body, held up the ball—knocked loose by his famous slide—and inquired sweetly, "If I'm out, then what's this?"

But Kelly on second after a steal is only the start of the fun. Kranks who have seen him in action before seize the arms of their neighbors and cry excitedly, "Watch close, now! You ain't seen *nothin'* yet!"

His wiles drove poor umpires wild

The next batter hits a long single to right. Kelly starts for third, but is looking back over his shoulder. Why? To see what the umpire (there was only one in those days) is doing. If he is watching the play in the outfield, or running to first to call a play there, the King suddenly cuts past the pitcher's box (there was no mound then) and streaks for the plate. Everybody sees it but the hapless umpire, who hears the cries of rage from the opposing players and screams of delight from the stands. He *knows*, but can't do anything about it because he didn't *see* it.

Kelly was also known to take a shortcut from first directly to third via the pitcher's box if the umpire's attention was directed elsewhere, and there is even an account of how he once scored from first without going within spitting distance of either second or third. Such tales credit his audacity but, for ingenuity (and causing the umpire fits), nothing can match the incredible play he created one afternoon in Detroit.

Tagged out at plate, Kelly spreads his legs wide to let a teammate slide home with the winning run.

Once again, it's the ninth inning. The score is tied, there's one out, and Mike is at bat. He reaches first on a single. The next batter, shortstop Ed Williamson, draws a base on balls. The pair then executes a successful double steal and Kelly, as usual, slides into third. He leaps up clutching his arm and yowling in pain. All the White Stockings, including Williamson from second, rush over to see what's wrong. In the confusion, Kelly whispers some hurried instructions in Big Ed's ear, then breaks for the plate. Alertly, the Detroit third baseman zips the ball to the catcher, who has plenty of time to tag Mike out. But just before he reaches the plate, Kelly stops short and spreads his legs far apart. And as the catcher leans forward and tags him for the second out, Ed Williamson, running hot on his heels, dives through the King's outstretched legs

New Jersey free-lance writer Jim Cox discovered "King" Kelly during the players' strike of 1981. Unable to watch the games, he read about them.

NEW ZEALAND. WHERE A MOUNTAIN RANGE NAMED THE REMARKABLES IS NOTHING OUT OF THE ORDINARY.

Welcome to a place so beautiful it makes everywhere else seem almost commonplace.

New Zealand.

A country so richly blessed with scenic beauty that the hardest part of describing it is choosing a place to start. So why don't we start at the top?

OUR MOUNTAINS ARE REMARKABLE. OUR PRICES ARE TRULY AMAZING.

There really is a chain of mountains named The Remarkables. They loom above charming Queenstown (so named because she's a city fit for any queen) along Lake Wakatipu. While some of our gamest trout call the lake home, you can feed others by hand from shore. And while you dine in the restaurant atop Bob's Peak (accessible by cable car) you can drink in possibly the most beautiful sunset in the world.

Nearby Coronet Peak offers some of the hemisphere's best dry powder skiing from July to September. But although The Remarkables are just as special as the name implies, you haven't seen a thing until you've visited lofty Mt. Cook, *Aorangi* (The Cloud Piercer) to the original New Zealanders. Here in Mt. Cook National Park you'll stay at the elegant Hermitage Hotel, one of our finest. Incidentally, just because our Southern Alps are high, don't think our prices are, too. Rooms at the Hermitage range from $40 to $75, view included at no extra charge.

From The Hermitage you can tramp a meadow full of wildflowers in the morning, helicopter-ski or hike on a living glacier in the afternoon and dance to a lively band that very same evening. And once you've fulfilled your appetite for scenery, tranquility and grandeur, you can travel on to someplace truly special. The rest of New Zealand.

WELCOME TO OUR HOME.

New Zealand cities are small enough to be friendly, large enough to be interesting, old enough to be impressive and New Zealand enough to be not one bit stuffy. We have serene beaches and roaring rivers where you can take a jet boat ride that will take your breath away. We have underground caves and native culture. And golf courses where all your drives will be scenic ones. And maybe best of all, we have even more of the South Pacific right at our doorstep.

A BEAUTIFUL VACATION AT A BEAUTIFUL PRICE.$1072.

There's never been a better time to visit the places you've always dreamed of seeing. Lovely New Zealand. Vibrant Australia. Romantic Tahiti. Exotic Fiji. Air New Zealand can take you to more of them than any other airline.

Our roundtrip low season APEX fare from Los Angeles to Sydney, for example, allows you to stop over at any two for only $1072. Or you can choose from one of our many tours.

However you travel you'll get the service that prompted the readers of Travel/Holiday magazine to rate our flights the world's best for the second year in a row.

For more information about New Zealand and the rest of the South Pacific, call your travel agent. Or, for our free brochures, write Air New Zealand, P.O. Box 9000, Dept. SM9, Van Nuys, CA 91409.

air new zealand

Air fare based on low season APEX and subject to change without notice. Outward journey determines season. Tickets must be purchased 30 days in advance.

'Slide, Kelly, slide!'

Kel was offered $10,000 (with more to come) to quit the Players' League. Righteously, he turned it down.

to score the winning run! That one also kept the rules makers working overtime.

Mike Kelly was born in Troy, New York, an early baseball town, on December 31, 1857. His father died when he was still a boy, and his mother moved the family to Paterson, New Jersey. Young Mike left school early and got a job as a bobbin boy in one of the "Silk City's" many mills, but he spent every spare minute out on the sandlots, playing ball.

At 17, he joined the Paterson Olympics, the dominant semipro team in the area. In rapid succession he quit his job, signed with the Port Jervis, New York, team, moved quickly to play in Columbus, Ohio, then on to the Cincinnati Redlegs. As a rookie, he won a silver bat for the first home-park home run, and went on in 1879 to bat .348, alternating between catcher and outfielder.

A year later, Cap Anson signed Mike to a Chicago White Stockings contract. With a good team to back him, his legend took shape. Over the next seven years, the White Stockings won five league championships and Kelly was unofficially crowned "King Kel."

There were feelings of shock and betrayal when Albert G. Spalding, president of the White Stockings, sold the King to the Boston Nationals in 1887 for $10,000. It was a regal sum, an unbelievable sum for the period, probably ten times what the average man earned in a year. It was so unbelievable, in fact, that the Boston owners had the sales agreement reproduced in the newspapers. Sportswriters dubbed Kelly the "Ten-Thousand-Dollar Beauty," borrowing from the publicity releases of a stage lady of the time, and the city of Boston, teeming with Irish immigrants, went wild with joy.

King Kel, on the other hand, publicly wept and protested that he did not want to leave Chicago. But that was window dressing. Mike had no doubts about his huge value as a drawing card: he demanded a salary of $5,000, twice what Chicago had been paying him. The league owners, hungry for profits, had just established a $2,000 limit on player salaries, but the King was something special. Boston got around the new rule by giving him a $3,000 bonus for the right to use his picture in advertisements.

During his first ten days with the new club, Alfred Cappio writes, Kelly "made more hits, scored more runs, and stole more bases than the rest of the team put together." A few years later, Boston fans showed their jubilation over obtaining the greatest player of the age—and an Irishman, to boot!—by presenting Mike with a house, stable and land in Hingham, and a spiffy wagon and horse.

Even more touching was the "Welcome-home-we-miss-you" of the Chicago fans when the Beaneaters visited the Windy City for the first time that season. An enormous crowd filled the street around the hotel where the Boston team was to stay, waiting for the King to make an appearance. Kelly, true to form, had spent the long train ride cradling a whiskey bottle in his arms. He was probably still sleeping it off when the team carriage arrived at the hotel, but he woke up long enough to dazzle the crowd with his big smile during at least a part of the festivities. A local reporter enthused that "President Cleveland, or even the Queen herself, could hardly have had a more flattering ovation."

Festivities concluded, Mike's debut as a Beaneater in Chicago brought more than 10,000 people out to the park that June afternoon in 1887. It would be stretching the truth to say that, with two hits, he starred in

All things considered, Hyatt Hotels continue to be a touch above the rest.

Hyatt: It's what other hotels try to be. Over the years, and especially recently, other hotels have raised their rates within dollars of Hyatt without justifying that increase with the service and amenities that are, in total, uniquely Hyatt.

The world's most innovative hotel continues to lead the way. Hyatt is always pioneering new standards of contemporary hotel service at 109 prime locations across the U.S. and around the world. Personal attention and special touches are offered as a matter of course. Fresh flowers. Natural greenery. Just-squeezed orange juice. A complimentary newspaper in the morning. Express check-in and check-out.

Capture the Hyatt spirit at 109 hotels worldwide. Weekend packages are another special touch of Hyatt. For reservations, call your travel planner or 800 228 9000.

a touch of Hyatt®

HYATT® HOTELS

the game, for the final score was Chicago 15, Boston 13. But the King went on to have his finest year, batting .394 and stealing 84 bases, even though his team straggled home in fifth place.

Win or lose, Kelly continued to reign as King of the Diamond during his years in Boston. Two years later, a song called *Slide, Kelly, Slide!* was published in his honor. It concluded: "If someone doesn't steal you,/ and your batting doesn't fail you,/ They'll take you to Australia!/ Slide, Kelly, slide!" Despite the "spectacularly banal" lyrics, as they have been generously described, the song became as popular as the contemporary comic ballad, Ernest L. Thayer's "Casey at the Bat." In fact, included in the many versions of "Casey" are several that substitute "Kelly" for the hero's name and Boston for the storied town of Mudville. (Some years later, in 1927, *Slide, Kelly, Slide!* again served as the title for a work honoring the King, this time an MGM film starring William Haines.)

Meanwhile, back in the real baseball world of Boston in the 1880s, Mike was, according to one observer, the sole center of attraction for the fans who packed the park daily. And he seldom disappointed them.

There was the time, for example, when the Beaneaters were involved in a crucial game. The score was tied, there were two outs, and the winning run was at third, where the King was coaching. The Boston batter, no slugger, was laboring under a count of no balls and two strikes. Kelly signaled that he wanted to examine the ball. The pitcher ignored him. Kelly signaled again, adamantly. The umpire took a step and the pitcher underhanded the ball to Kelly—just as the King shrugged and turned away. The ball dribbled over to the stands, the runner on third scored, and King Kel made another entry in the book of baseball legends.

His creativity extended in more constructive directions, and he has been credited with establishing or popularizing enough baseball innovations to guarantee anybody a place in the Baseball Hall of Fame, to which he gained admission in 1945. The fact is, however, that his bronze plaque in Cooperstown, New York, does not list any of these supposed contributions, and some serious baseball historians consider them apocryphal. Nevertheless, they are part of the King Kelly legend and, as such, until someone else can make a better claim, they deserve at least this qualified mention. Here are the most important ones:

- First outfielder to back up his infielders.
- First right fielder to take a line drive on the bounce and throw out the batter at first base—a rare and exciting play still.
- First catcher to set up battery signals with his pitcher, and to signal the fielders what the pitcher would throw next.
- Inventor of the hit-and-run play (this was erroneously credited to the old Baltimore Orioles, who made good use of it but didn't create it).
- Innovator of the practice of having pitchers and catchers back up infielders to protect against overthrows to the various bases.
- First catcher to intentionally drop the new "birdcage" mask on the plate, or toss it in the path of an incoming runner to trip him or scare him or at least slow him up—not a glowing accomplishment, but a typical Kelly ploy that won a few games.

Asked if he ever drank during a game, Kel candidly replied, "It depends on the length of the game."

On billboards, the look of success

In Boston, the world seemed to be Mike's oyster. In addition to his $5,000 salary, money flowed in from streetcar companies, cigar companies and other enterprises for the right to plaster his good-looking Irish face on billboards in the nation's major cities. He was lionized wherever he went, and in the pubs and saloons that he frequented, the regular barflies vowed that his rendering of "Casey at the Bat" was superior even to that of comedian DeWolf Hopper, who had recited the poem in New York City in the late 1880s and was still at it in 1932.

For all his bad habits, Mike showed the kind of man he was in 1890, the year of the players' revolt. The owners had passed another rule limiting and reducing player salaries, and the athletes responded by joining together in the Players' Brotherhood and forming the new Players' League. Mike, named player-manager of

GETTING A LONG TERM CAR LOAN? DON'T GET A SHORT TERM CAR.

Some of the figures you hear rattled off in banks these days can be downright frightening.

Interest rates on car loans have been as high as 16%. And car loans can now run as long as four years.

Paying one back is starting to look a little like settling the entire national debt.

If you're going to sign up for that kind of commitment, make sure you select a car that justifies it. One that will last longer than the payment book.

Consider a Volvo. Volvos have always had a reputation for lasting a long time in Sweden. And recent findings show they do well in this country, too. In fact, the life expectancy of a Volvo is 1/3 longer than the average life expectancy of all other cars on the road.*

What's even more important, Volvo's long list of comfort and performance features make it the kind of car you'll want to keep for a long time.

So this year, finance a Volvo. You may not laugh all the way to the bank. But you won't cry, either.

VOLVO

A car you can believe in.

**Analysis conducted by Ken Warwick & Associates, Inc. Based on a comparison of U.S. registration data for Volvo and for the automobile industry as a whole and not by individual make. Summary available at your Volvo dealer.* *©1982 Volvo of America Corporation.*

'Slide, Kelly, slide!'

the Boston entry, built a team that won the pennant.

Under severe financial duress, the National League owners commissioned Chicago's Albert Spalding (who three years earlier had sold Kelly to Boston) to "persuade" him to return to the field, on the assumption that his defection would break the back of the strike. At a secret meeting, Spalding offered Mike a certified check for $10,000 as well as a three-year contract with blanks which he could fill in with his own figures. The total bribe was said to have amounted to $25,000. Mike asked for some time to think it over, took a walk, returned in half an hour and said, "Aw, I want the $10,000 bad enough, but . . . I can't go back on the boys."

Impressed, Spalding shook Mike's hand, then lent him $500 when he learned that the man who had just turned down 25 grand was broke.

Other players weren't cut from the same kind of cloth, and the Brotherhood broke up. Mike returned to the Beaneaters, but his playing days were drawing to a close, the decline brought on as much by drink as by the passing years. Booze had been the King's weakness since his earliest days in the majors, and there are almost as many anecdotes devoted to his drinking habits as to his playing exploits.

Mike was not a social drinker. He drank to get drunk, and worked at it faithfully. On a world tour in the 1890s, he remarked to a British journalist that he had "got home at 6 A.M. with as fine a jag as you could get in any country in the world." The reporter asked if he drank during a game, and Mike replied, "It depends on the length of the game."

He did, in fact, drink during many a game, as well as before and after. The *Sporting News* once complained that he had held up an exhibition game while he "quaffed beer with disreputable characters in the grandstand," according to Harold Seymour's *Baseball, The Early Years*. But beer was not Mike Kelly's drink, not when he could get a scupper of red-eye for a paltry 15 cents. There were times, especially later in his career, when he had "trouble with his feet" running the bases or chasing a fly ball, occasionally getting so tangled that he fell flat on his face. He also sometimes experienced difficulty following the flight of the ball through the air, and after he muffed a catch—but not by much—he would shake his head and mutter, "By Gad, I made it hit me glove."

The end of the trail came for Mike in 1893. He was sent on loan to the financially pressured New York Giants in hopes that the fame of his name would bring the crowds through the gates. Trying to keep him in the lineup, the Giants sent him to sober up in a Turkish bath before each home game. But there happened to be a saloon next door. . . .

Shipped back to Boston, where he was no longer wanted, the King then moved on to manage Allentown in the Pennsylvania State League. Even there, in the bushes, the cheers turned to boos and catcalls when the fans realized they were seeing only a bloated shadow—and a tipsy one at that—of the hero who had once been King Kel. Still, Mike led Allentown to a winning season. He played his last game with Allentown-Yonkers (the teams had merged) against the Giants. Yonkers won and Mike was so pleased, he had a drink on it.

The humiliating slide to burlesque

The stage came next. At the peak of his fame he had been paid fat fees to take on minor roles, and he remembered the applause that used to follow his rendition of "Casey." But those successes had taken place in hotel barrooms where, usually, he was picking up the tab. Ticket-buying theatergoers were a tougher audience; the slide to burlesque was short and bitter.

Mike opened a saloon in New York with "Honest John" Kelly, the famous umpire, as partner (it was called "The Two Kels"), but he still yearned for more exciting times. Early in November 1894, he headed by boat for Boston, hoping his vaudeville act would receive kinder treatment in the city where he had been so recently a favorite son. On the trip, a head cold worsened and by the time he had arrived in Boston, a doctor called it pneumonia. In the doorway of Boston Emergency Hospital, one of the stretcher bearers stumbled and Mike slipped to the floor. "This is my last slide," he whispered hoarsely.

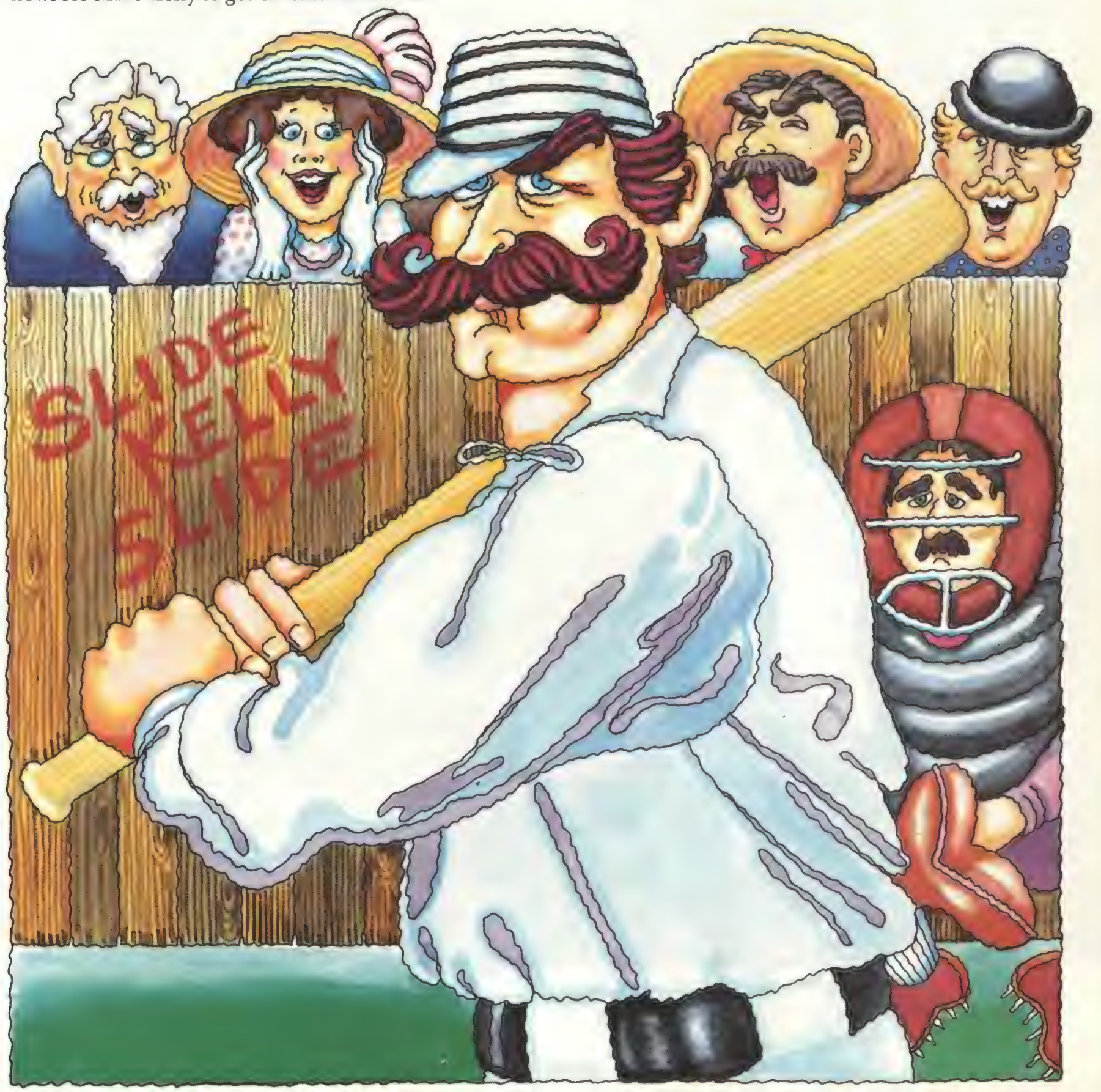
It was. Three days later, on November 8, just short of his 37th birthday, the King was dead. "At 9:55 last night," the *Boston Globe* sermonized, " 'King Kelly' heard the decision of the Great Umpire from which there is no appeal. The famous ball player passed away . . . his old friends watching every phase of his last uphill fight in the game where defeat is sure. . . ."

He would have appealed, given the opportunity. He wasn't ready for death. He had often bragged, while money jingled in one hand as it flowed out the other, that the "Ten-Thousand-Dollar Beauty" would never be a pauper. Yet he was broke often enough even then, and he was broke when he died. Left destitute, his widow was taken in by Honest John Kelly's family.

But if Mike died poor it was only in money. More than 5,000 fans filed through the rooms of the Boston Elks Hall where the King lay in state, and thousands more filled the street outside St. James Church while the religious services were being conducted. It would be baseball's biggest and best-attended funeral until Babe Ruth's body was honored at Yankee Stadium in 1948. Straitlaced, teetotalling Cap Anson, who always claimed he had traded Kelly to Boston because of his bad influence on the younger players, provided a dry sort of epitaph: Kelly had "one enemy . . . himself."

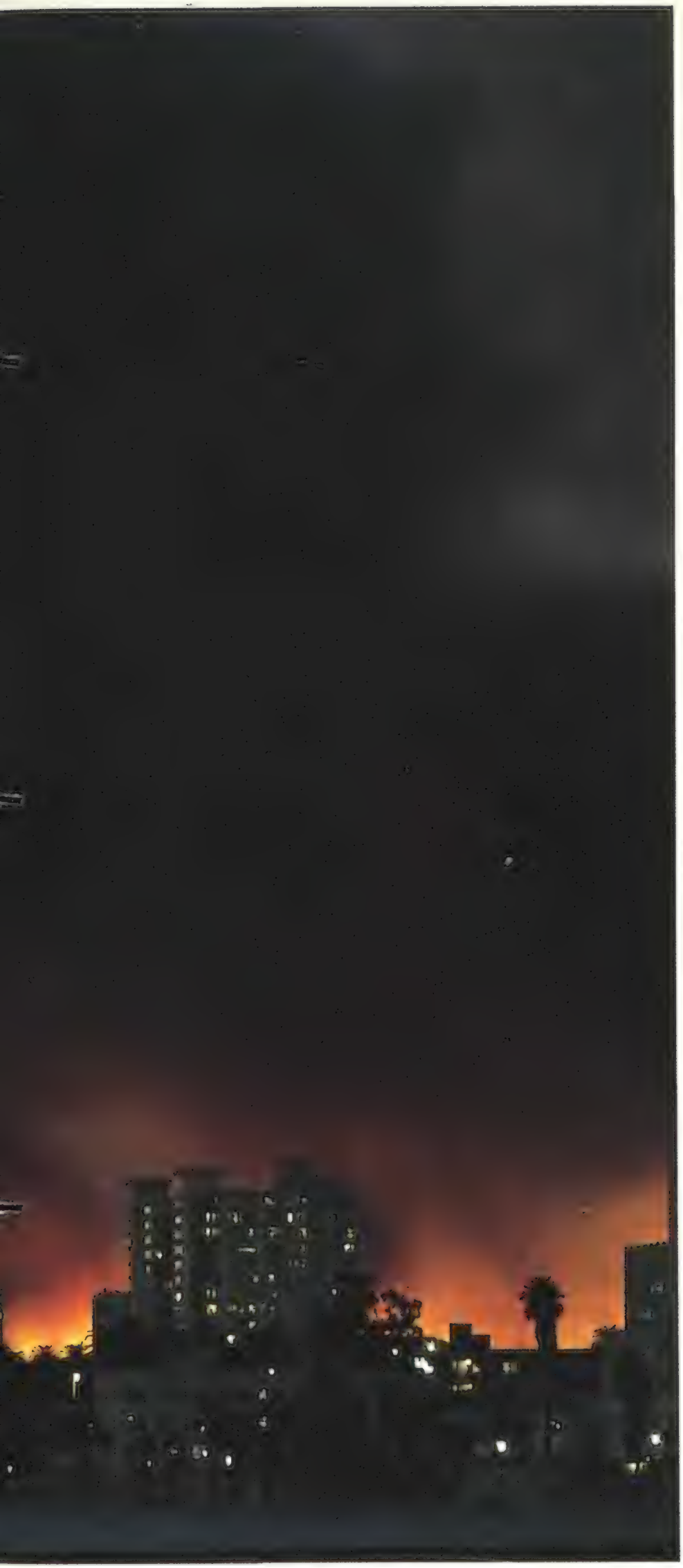
But baseball historian Tom Shea's final tribute comes closer to the heart: "The gods must have loved him. They took him quickly when he could no longer shout—'I'm in the game!' "

Knowing they "ain't seen *nothin'* yet," the "kranks" howl for Mike Kelly to get on base—and *slide*.



Chad Slattery/After-Image, Inc.

Santa Monica, seen from waterfront, is silhouetted by chaparral ablaze in the mountains behind it.



By Donald Perry and Sylvia Merschel

In the chaparral, life ends and begins in a great blaze

Those yearly, spectacular brushfires on the hillsides of Southern California lay bare a hidden world of wildlife

Death and destruction stretched for miles along the Southern California foothills. Smoke rose in narrow plumes from cracks in the earth. Only a day earlier the whole area was engulfed by furious wind-driven flames. What had been a thick covering of impenetrable vegetation known as chaparral was reduced to a layer of gray ash. Blackened stumps and branches seemed lifeless monuments to the disaster.

The remains of animals were occasionally scattered across the bare hills. Yet even this soon after the fire, the fresh footprints of a surviving lizard, a mouse, a rabbit and many more creatures crisscrossed the ash.

Each year during the fall season, wind and humidity conditions combine to give the chaparral a capacity for near explosive ignition. Once it is ignited, people can only watch the spectacle unfold and try to save their structures. During Thanksgiving week 1980, for example, blazes that enveloped the area around San Bernardino destroyed about 300 homes and 150 other buildings, charring 84,000 acres. Residents and fire fighters reported balls of fire several inches in diameter hurtling past them at speeds of 90 miles per hour. Four persons perished; one man suffered a heart attack. More than $42 million in property and $40 million worth of protective watershed were burned out. A chaparral fire in August of this year threatened to overrun the California condor wildlife refuge north of Los Angeles, last breeding ground for this species.

During major emergencies fire-fighting crews are mobilized and flown in from all over the United States.

Photographs by Donald Perry

Chaparral's fiery ecology

Ashes of ground cover form windblown clouds after the 1975 Big Tujunga fire in San Gabriel Mountains.

Millions of gallons of fire-retardant chemicals and water were dropped on targets in 1980, a record year, by squadrons of specially designed aircraft. But there is considerable uncertainty among biologists, public servants and the public as to how to curb these devastating fires before they actually start.

Many fire fighters who know the chaparral share a common belief that it is "designed" to burn. This corresponds to an important biological hypothesis, accepted by nearly all who have studied the chaparral, that it is a fire-dependent community. This hypothesis, while compelling, still needs work. It may be, for example, that some of these characteristics can be attributed to other selective pressures, such as climate. Chaparral plants do have features which help them survive fires and are thought to have features which are designed to promote fires. A better understanding of this fascinating plant community is especially important now. Chaparral fires are occurring with alarming frequency and close to 90 percent of the fires in the immediate area around Los Angeles are caused by man. Approximately 43 percent of the incidents are attributed to arson; the remainder are due to human negligence or accident.

A closer look at the chaparral may turn up some clues that help to explain its propensity for burning. In California there are two main coastal shrub vegetations which between them cover eight to nine percent of the state's land area. Chaparral is found in foothills primarily from 1,000 to 5,000 feet. Coastal sage scrub is found at lower elevations. Both types of vegetation are found on the hills in the Los Angeles area.

From a distance the mature chaparral seems to form a continuous undulating surface of fused and abutting tops of plants. These plants are bushes ranging from about three feet to more than 15 feet in height. They form a single layer of dense vegetation. Very little grows under this canopy.

Entrance into chaparral is barred by a tightly interwoven network of tough, gnarled branches. Intrepid hikers who plow headfirst through the barrier emerge scratched, with torn clothes and an occasional tick. Only small mammals, coyotes, deer, birds, reptiles and an assortment of other animals can effectively travel through and inhabit this region.

On some sites, by the time the chaparral reaches 30 years of age, up to 50 percent of its organic material may be dead. This constant accumulation of flammable material produces an increased potential for severe fires.

The dominant plants are evergreen and do not drop leaves during droughts. Their thick, leathery, resinous, small leaves are designed to minimize evaporation.

Biologist Donald Perry wrote about the jungle canopy in the June 1980 SMITHSONIAN; *Sylvia Merschel coauthored their book,* Journey into a Hollow Tree.

Deer overtaken by Big Tujunga fire, a likely victim of the smoke, is an unusual sight. Most animals escape.

During very dry weather the leaves become extremely flammable. Although this may promote fires, the vegetative characteristics of the plants also can be seen as an adaptation to the scarcity of water. During the long dry period from May to November temperatures may exceed 100 degrees toward the inland sections of Southern California, while the relative humidity may sometimes drop below five percent.

The most important climatic condition which contributes to these chaparral fires is the occurrence of a special type of wind associated with mountain systems. In Southern California the winds are called Santa Anas, Santanas or "devil winds." In various parts of the world, their names differ: "chinook" in the North American Rockies, "ghibli" in Libya, and "zonda" in the Andes of Argentina.

The Santa Anas start in the very dry Great Basin area east of the Sierra Nevada. There, above Nevada and Utah, high-pressure weather builds up. At the same time, low pressure exists on the western side of the mountain ranges, causing the air to be both sucked and pushed toward the Pacific Ocean.

Santa Ana winds reach speeds of between 20 and 90 miles per hour and may last for three or more days. The combination of hot, dry wind—during the end of the long waterless summer and fall—and the parched vegetation produces optimum fire-weather conditions.

But even with the right climatic conditions, surplus dried fuel, volatile compounds in the leaves, steep mountain slopes and fanning winds, something must supply the spark. There are only two likely sources: lightning and people.

Man as a source of fire is recorded in history and prehistory. People have often used fire as an effective tool to alter their habitat. It quickly clears land areas and promotes the development of grasslands. These in turn have provided food in the form of seeds and meat, since grazers proliferate in grasslands. In some cases these alterations are permanent.

It has been estimated that people and their fire arrived in the area some 15,000 to 20,000 years ago, which seems much too recent to be the selective force behind the evolution of a whole plant community. However, recent research has produced evidence that wild-land wildfires have had a major environmental influence in Southern California for two million years or more. If so, as core analyses off the Santa Barbara Channel suggest, then wildfires may have been a selective force.

Not far off the Southern California coast is a chain of islands known as the Channel Islands. The frequency of burning on them is extremely low compared with the mainland. Nevertheless, a fully developed

Meadow mouse (vole), moves young from accidentally exposed nest 16 months after Pacific Palisades fire.

Wild, or prickly, cucumber climbs charred branch in herbland phase of regeneration after chaparral fire.

chaparral plant community exists. These island communities apparently are stable and not undergoing a successional change to a new vegetation type. From this we may be able to conclude that the high frequency of fires as seen on the mainland is not essential to maintaining all chaparral-type communities. Adaptations do exist, however, that help the plants survive a fire.

These are best seen by considering the destruction of a hypothetical area of chaparral and the process of its rebirth. It is here that the most compelling adaptations for survival are found.

It is a sunny autumn day. The air is dry. Strong hot Santa Anas are blowing out to sea. A traffic accident starts a fire that soon rages out of control. Within hours a thick black plume of smoke and ash rises high into the sky. The fire is racing from ridge to ridge, incinerating everything in its path. In places it has been known to move so quickly that not even fast-running deer or coyotes can escape.

By morning the wind has stopped; with it, the fire's advance. Plumes of smoke from scattered hot spots rise straight into the air. Everything looks dead. The impenetrable tangle of branches lies in heaps of ash upon the ground. The chaparral is suddenly penetrable, but only its ghost remains.

Yet in death, an intriguing story of chaparral life emerges. Some hillsides are occasionally marked by circular splotches of gray ash, like craters on the lunar surface (p. 140). What are these spots? They are the sites of high-intensity fires—the result of burned accumulated wood, often large plants—which have left behind patches of ash.

But sifting through some of these ashy spots reveals a startling story. Skeletal remains of all kinds can be found: the rib of a deer, the jaw of a rabbit and the bones of other animals. Is this where many of them were stopped in their flight from the flames? If so, whole skeletons would be found. But since only select bones are present and since they have no charred flesh attached, they must have accumulated at these spots long before the fire. But how?

The evidence points to the pack rat

Among the remains are bones belonging to a certain chaparral rat, *Neotoma fuscipes*. This animal is commonly called the pack rat or wood rat and is an important food source for coyotes and other carnivores. The pack rat builds its nest, which can be five feet tall, above ground, not below like those of many rodents. The nest is made primarily of dead branches and assorted junk that can be carried home. A flattened tin can, leather belt, sock, deer rib—nearly anything will do. The gray ash may be the remains of the rat's home.

COPYRIGHT IMPORTED BY G. W. A. TAYLOR & CO. MIAMI, FLORIDA 1981

VSOP
Fine Champagne
COGNAC

COURVOISIER. THE COGNAC OF NAPOLEON

A parasitic plant, dodder, sends out shoots soon after fire; "roots" survive because protected by the host.

Filaments of new web encircle nest hole of spider that escaped Big Tujunga fire by hiding underground.

In fact, pack rats become more numerous in old stands of chaparral where their nests get much larger, often serving as kindling points for extending the wildfires.

Similarly, the fires expose the habitats of the trapdoor spider. Normally the subterranean homes of these interesting spiders are impossible to locate because the entrances are camouflaged by a detritus-covered trapdoor essential to their survival—an unsuspecting insect that walks on the door will be quickly captured. After a fire, however, the ground litter has turned to ash and the wind blows it away.

What survives the fire? The desolation of plants and animals is both real and imagined. But the baked earth is not dead, for forces have been triggered that will give rise to new life. The chaparral will be reborn like a phoenix from its own ash. The process begins immediately but is not complete for many years, as a striking succession in both plants and animals takes place.

The day after the fire, fresh spots of unscorched earth mark the blackened surface soil. Animals have dug loose earth from their underground passageways. The fire, though hot and intense at the surface, does not kill all the animals that have subterranean nests—such as spiders, snakes, kangaroo rats, ants, ground squirrels and lizards—although some may suffocate.

Many of the plants have been killed outright. Fire transforms the vegetation into ash, charcoal and gas. Minerals once locked in the plants are released into the soil. Within hours after the fire, pioneering bacteria and fungi begin adding organic nutrients. Thus, soon after a fire, the earth becomes a nutritious seedbed for the establishment of new plants.

The charred stumps of numerous species of chaparral look lifeless. But astonishing transformations soon take place. Emerald-green shoots erupt through cracks in the blackened bark; within weeks the ground is dotted with fine green new growth. Within months after the seasonal rain the vegetation appears to be thick and luxurious.

After decades, the "fire followers" spring up

Some plants survive because the soil insulates their subterranean tissue from the heat.The tissue is a lignotuber, or root-crown burl, that stores nutrients, water and numerous dormant buds. After a fire, buds on the burl sprout and grow rapidly to the surface, even when there has been no rain.

Within the partially scorched soil, many other transformations are taking place. For example, long-dormant seeds are awakening. These are the seeds of a totally new group of plants whose reproductive and growth cycles have been stimulated by the conditions resulting from fire. For 20, 50 or 100 years or more, these plants, known as ephemerals, "fire followers" or

A carat or more.
A little extra weight she won't mind putting on.

The 1.57 carat diamond ring shown below is enlarged for detail.

An extraordinary diamond
of a carat or more.

Every diamond is rare.
But a diamond of a carat or more
is only one in a million.
And, like love, becomes more
precious with time.

A miracle among miracles.
Born from the earth. Reborn on a
woman.

The extraordinary diamond
solitaire. When a man's achievement
becomes a woman's good fortune.

A diamond is forever. De Beers

Splotches of ash, left by burned shrubs or pack-rat nests, appear after fire in the Santa Monica Mountains.

"pyrophyte endemics," have rarely been seen in the chaparral. Now, with the coming of the rains, they prepare for their place in the sun.

The ephemerals flourish for only a few years until a succession of chaparral plants choke them from existence. In the interim, they provide food for a complementary community of new types of animals that in turn become bountiful prey for coyotes and hawks.

It is in the life histories of the ephemerals that some biologists see a clear adaptation to fire. Where do the seeds come from? If the chaparral never burned, how could the ephemerals survive? And how could so many numbers and types of ephemerals be present immediately after a fire? The usual answer is that the seeds are produced by the community of ephemerals which flourished during the period immediately following the preceding fire. Dormancy ensures that the seeds stay alive for many decades.

With the passage of fire and the first rain, the ephemerals begin to germinate. Some have hard seed coats that apparently "need" fire to weaken them, thus allowing the embryo to begin an active life. Too much heat, however, is lethal.

Other species respond less to fire than to the removal of the dense tangled canopy of chaparral plants. Once the canopy is gone, sunlight reaches the soil producing an environment that fluctuates greatly in temperature and humidity. The germination of seeds follows. This early period of chaparral regrowth is called the "herbland" phase. This phase lasts about five years and is a time of increased growth and proliferation of post-fire species. One of the first to appear is the wild cucumber (p. 136) with its white flowers. Its annual vine climbs and drapes itself over charred branches. By March, spring fruits are produced.

Poppies, lupines, snapdragons and lilies

At the same time, a dazzling display of golden California poppies, blue lupines and other wildflowers begins. Later, snapdragons appear. By May and June the bulbs of lilies that have lain dormant in the soil have sent up shoots and begun blooming.

The burst of edible plant biomass and increased accessibility favors animal population growth. Deer may become more abundant in open areas as they are drawn to the new forage. California meadow voles (p. 136) and other animals not usually found in chaparral appear in the new herbaceous and grassy zone. Animals that survived the fire and subsequent period of low food availability may finally recover.

After about seven years of growth, the preburn chaparral plants have rebounded to the point of dominating the landscape again. Light and seedbed conditions start to be limited. As the herbaceous flora

becomes rare or disappears, the associated animals decrease in numbers.

The chaparral has now entered the most frequently encountered successional phase. The community is closing in on maturity. New shrubs produced from seeds compete for space, both with each other and with their parents, which may have survived the fire as subsurface structures, or root-crown burls. Life spans vary and there is attrition as the plants begin to reach over each other's tops for sunlight. At this stage summer drought may kill off some individuals. All the plants are large and tightly packed so that a dense layer of vegetation forms a continuous canopy several yards above the ground. This is the mature chaparral. It is a closed community that as far as we know is not invaded by other species.

After 25 years, most stands of chaparral are mature. Little vegetative growth occurs. The understory is free of plants, and dead material accumulates. Its decay may be inhibited by certain biochemicals produced by the chaparral.

The appearance of senility is deceiving

After 75 years the chaparral plants display large amounts of dead wood, and branches may die back to the trunk. This gives an appearance of illness or senility. However, these are not necessarily accurate words for still-viable plants that are similar in appearance to the bristlecone pine—the oldest living trees on Earth. Yet because of arson or accident, these interesting communities can be turned into serious hazards, especially when they are adjacent to populated areas. The attempts at total fire suppression of the past 50 years have actually increased the stands of "senile" chaparral. These areas, because of thicker fuel beds, can produce hotter and more intense fires.

An attempt to control the devastating effects of wildfires by a program of prescribed burning was recently instituted by the U.S. Forest Service and the Los Angeles County Fire Department. Land managers determine when to burn a given area both to reduce the danger of wildfires and to increase the "vitality of the chaparral."

Weather is monitored for three or more days prior to a planned burn. Wind speed and direction, dead-fuel moisture, relative humidity and air temperature are fed into a hand-held computer to determine the optimum prescribed burn conditions. The best times usually are between November and March when the solar days are short and humidity is high.

Then, using a new tool called the helitorch, a substance called "Alumagel" is ignited and dropped from a helicopter. The prescribed burn is started at the top of a slope for better control. Riparian areas, such as

Landscape seen on opposite page, but here 16 months after fire, shows rapid recovery in herbland stage.

the gullies that transmit water during the wet season, are spared to provide refuge for wildlife and to prevent flood damage.

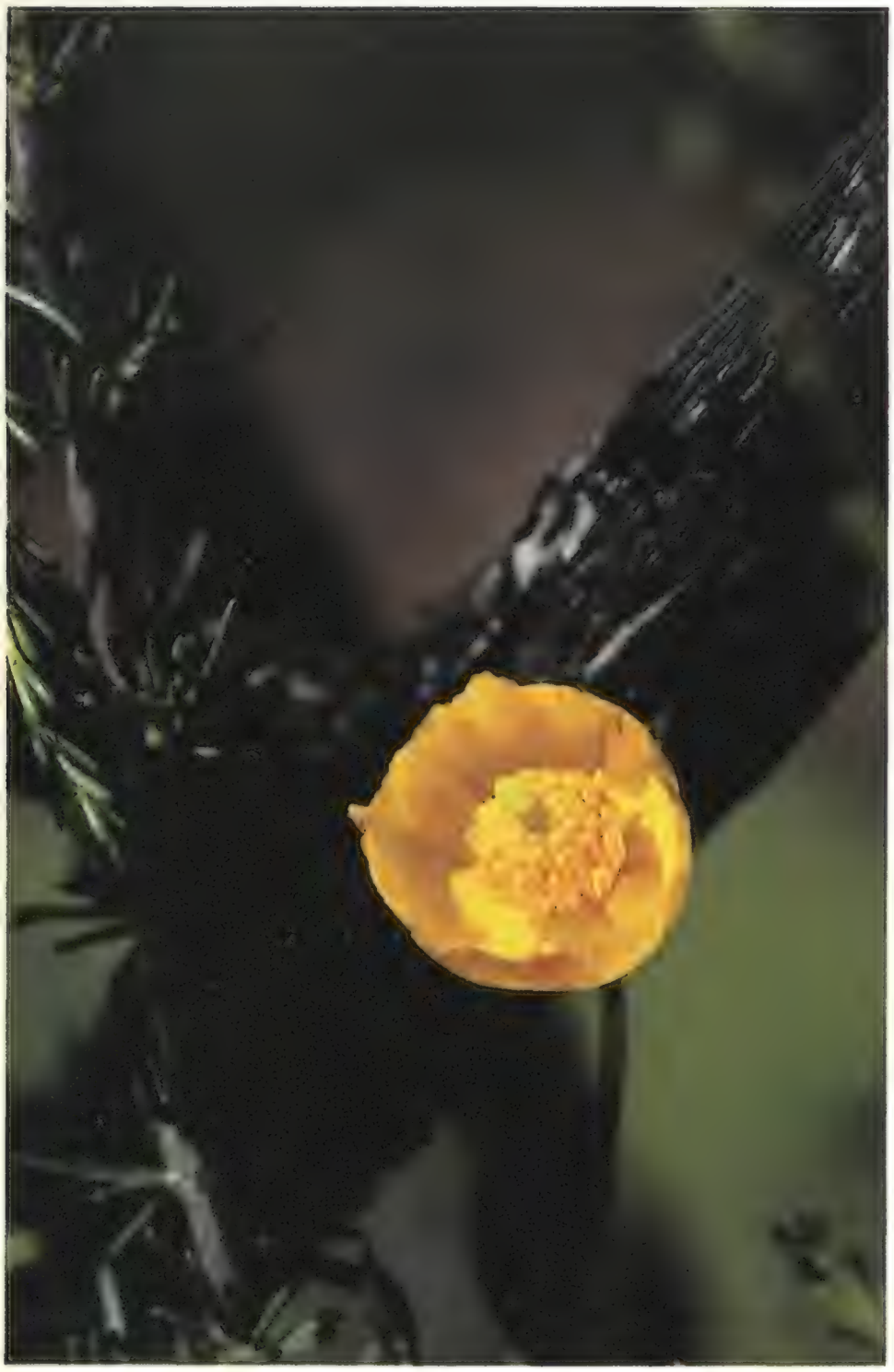
The method produces some favorable results. Using a concept called mosaic burning, only parts of an area are burned, creating a vegetative cover of differing age groups. This greatly reduces the chances of a destructive wildfire raging uncontrolled over long distances. Because the season for burning is when humidity is optimal, prescribed burns are of low intensity. Much of the ground cover remains intact. Lower heat prevents sealing of the soil, which remains easily penetrated by rain, thus preventing flood runoffs and creating a more nutritious seedbed.

A mosaic of varied-age chaparral, the result of prescribed burning, can increase species diversity by increasing habitat diversity—more kinds of plants and animals can be found within smaller areas. In a Northern California project, a 300-percent increase in the deer population was reported. The deer were probably taking advantage of the increased range in food supplies that are available in a mosaic community.

The Los Angeles County Fire Department instituted a prescribed burning program in the 1979-80 season. Three hundred acres were burned in five prescribed fires. The following season, 1,500 acres were burned in 18 fires ranging in size from eight acres to 300 acres. In the 1981-82 season, 3,000 acres were burned in nine fires ranging from 22 to 1,600 acres. The 1982-83 projection is to burn 5,000 acres in nine fires. The results are positive. Costs of this program are only a fraction of those incurred by using traditional means of preventing wildfires. Esthetically, the areas are much more pleasing. Few of the devastating effects of uncontrolled fires are evident. Flood danger may abate and water supply may increase, if briefly.

Compared to the 35,000 acres burned by 48 wildfires in 1980 in Los Angeles County, or the 25,000 acres burned by 115 such fires in 1981 (a wet year), the extent of the prescribed burn areas seems almost insignificant. Nevertheless, the program is still in its pilot stage and the results so far only promise a means to control some wildfires.

More study is needed to clarify the relationship between characteristics of chaparral plants and fire. The chaparral is a community rich in plant and animal species, intriguing in its cycle of life and powerful in its effect on mankind. It remains a community whose life, partly written in fire, includes much we have not yet learned to read.



Bush poppy appears in spring after fire; several years later, poppies may dominate areas of chaparral.

Hillside of black mustard, burnt stems, overlooks Hollywood six months after 1980 Mount Olympus fire.

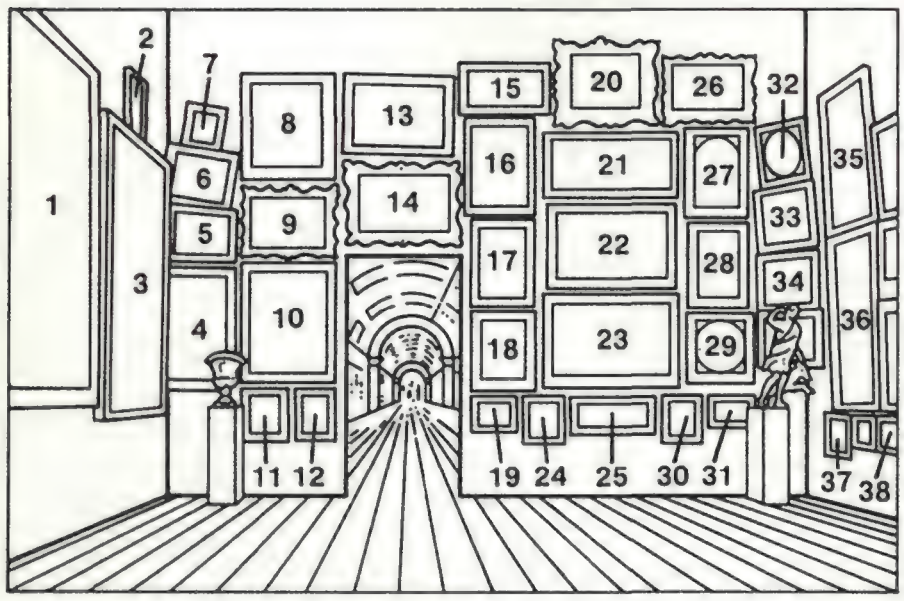
By Earl A. Powell

The record sale of a masterpiece of masterpieces

Purchased for $3.25 million, Samuel Morse's Gallery of the Louvre *replicates the works of many great artists from Raphael to Watteau*

In October of 1833 Samuel F. B. Morse unveiled to the American public an epic painting entitled *Gallery of the Louvre,* on which he had lavished his attention since the winter of 1831-32. This monumental effort depicted the Salon Carré and the extensive gallery beyond. It presented in its complex iconography 38 identifiable miniature copies of world masterpieces. In the center of this painting the artist portrayed himself, leaning over to instruct a student.

The picture was a culmination of Morse's efforts to educate the American public, to elevate its taste and to establish a threshold of erudition through which a national school could develop. The public's reception of this ambitious picture was, however, curiously indif-



Keyed to diagram, left, the works are as follows: 1) Veronese, *Marriage at Cana*; 2) Murillo, *Immaculate Conception*; 3) Jouvenet, *Descent from the Cross, and the Preparation for the Burial*; 4) Titian, *Christ Crowned with Thorns*; 5) Caravaggio, *The Fortune Teller*; 6) Poussin, *Winter (The Flood)*; 7) Tintoretto, *Self-Portrait*; 8) Van Dyck, *Venus, Accompanied by Cupid, Entreats Vulcan . . .*; 9) Claude, *Cleopatra Disembarking at Tarsus*; 10) Murillo, *Holy Family*; 11) Teniers, *The Knife Grinder*; 12) Rembrandt,

The Angel Leaving Tobias; 13) Poussin, *Diogenes Throwing Away His Bowl*; 14) Titian, *The Pilgrims at Emmaus*; 15) Huysmans, *Landscape*; 16) Van Dyck, *Portrait of a Lady and Her Daughter*; 17) Titian, *Portrait of Francis I*; 18) Murillo, *Beggar Boy*; 19) Veronese, *Christ Carrying the Cross*; 20) Correggio, *Mystic Marriage of St. Catherine*; 21) Rubens, *The Flight of Lot and His Family*; 22) Claude, *A Seaport at Sunset*; 23) Titian, *Entombment*; 24) Leonardo, *Mona Lisa*; 25) Le Sueur, *Jesus Bearing the Cross*; 26) Rosa, *Landscape*; 27) Raphael, *"La Belle Jardinière"*; 28) Van Dyck, *Portrait of a Man in Black*; 29) Reni, *Union of Design and Color*; 30) Rubens, *Suzanne Fourment*; 31) Cantarini, *Repose of the Holy Family*; 32) Rembrandt, *Head of an Old Man*; 33) Van Dyck, *The Adulterous Woman . . .*; 34) Vernet, *A Marine View by Moonlight*; 35) Reni, *Dejanira and the Centaur Nessus*; 36) Rubens, *Thomyris, Queen of the Massagetae*; 37) Mignard, *The Virgin Mary and Infant Christ*; 38) Watteau, *Embarkation for Cythera*.

CALL EUROPE $1.42
FIRST MINUTE

Now you can dial a
1-minute minimum call to most
of Europe for just $1.42. Additional
minutes are only 80¢ each. So
even a nice long visit is a bargain.
Just dial the call yourself
any night from 6pm to 7am.
If you don't have International
Dialing in your area, you still get
the same low rate as long
as special operator assistance
is not required. Check the chart
below for calling costs.

Bell System

Bell Brings The World Closer

Region/Dialable Countries	Rate Levels	First minute	Additional minute	Hours
EUROPE: Andorra Austria Belgium Cyprus Denmark Finland France Germany, Dem. Rep. & Fed. Rep. Greece Iceland Italy Liechtenstein Luxembourg Monaco Netherlands Norway Portugal Romania San Marino Spain Sweden Switzerland Turkey U.S.S.R. Vatican City Yugoslavia	Standard	$2.37	$1.33	7am-1pm
	Discount	1.78	1.00	1pm-6pm
	Economy	1.42	.80	6pm-7am

Federal excise tax of 1% on all calls billed in the U.S. Want to know more? Call our International Information Service, toll free: **1 800 874-4000**

ferent, compelling William Dunlap to write of it in 1834: "Every artist and connoisseur was charmed with it, but it was 'caviare to the multitude.' " The *Louvre* remains, nevertheless, a testament to an age of idealism, of heroic ambitions and unfulfilled dreams.

The painting, however, became the subject of intense front-page national interest in late July when it was announced that the collector Daniel J. Terra, founder of the Terra Museum of American Art in Evanston, Illinois, and the President's Ambassador at Large for Cultural Affairs, had bought it for $3.25 million. The six-by-nine-foot painting had been in the possession of Syracuse University since 1884. The price paid was the highest on record for an American work of art; the previous record of $2.5 million was paid in 1979 for *Icebergs* by Frederic Edwin Church.

Early in his career, Morse announced it as his goal "to rival the genius of a Raphael, a Michelangelo, or a Titian." In this declaration he was speaking for a generation of artists who, in the years following the establishment of the new Republic, sought to found a national school of art. Central to his efforts was *Gallery of the Louvre*. The failure of the painting to capture the imagination of the public when first exhibited contributed to his disillusionment with painting. Eventually, he abandoned art for the second of his careers, becoming famous as the inventor of the electromagnetic telegraph. Morse's second career appears to have been more consistent with the national mood of his day. In 1867 Henry Tuckerman in his *Book of the Artists*, on the earlier history of American art, noted that "the Patent Office rather than Galleries of Art seemed the destined conservatory of national fame."

Samuel Finley Breese Morse was born in 1791, the son of a famous Boston-area minister. Following his graduation from Yale College in 1810, he went to London to study at the Royal Academy, which was then presided over by American expatriate Benjamin West, and on his return to America in 1815 hoped to establish a school of American history painting. He found commissions, however, only for portraiture and made his living doing portraits in New England and Charleston, South Carolina, until the early 1820s, when he began work on his first major American history painting, *The Old House of Representatives* (now in the Corcoran Gallery of Art in Washington). This painting, which he worked on for more than a year, was a financial failure, a precursor of his later, even more ambitious, painting of the Louvre. He continued to be a spokesman for the development of an American school and in 1826 became the first president of the National Academy of Design. In 1829 Morse returned to London, then divided most of his time between Italy and Paris, where he became reacquainted with the great American novelist James Fenimore Cooper. They shared the same republican sentiments and, more important, a wish to inspire an American cultural awakening by exposing their countrymen to European cultural ideals that would have particular meaning for them. It was in this ambitious spirit that Morse set about painting the Salon Carré.

The artist's selection of the paintings to be represented in the picture was sensitively discriminating, for he did not simply record the Salon Carré installation as it appeared during his time, but rather reconstructed what, to him, constituted an ideal personal analysis of the Louvre collections. It was his intention through this painting to present to an untutored public the grand tradition of European art, to encapsulate the highest level of achievement in painting which, collectively represented, would bring to America in one encyclopedic document the culmination of European visual achievements.

In the end, the painting was perhaps too ambitious. It was a painting about painting that did not fulfill its purpose because it moved beyond its audience's general comprehension of the history of art. The importance of this picture in the history of American art cannot be underestimated. It can be appreciated today as the poignant legacy of a major artist who sought to inspire and educate a new nation in a single masterpiece which summarized the history of Western art.

Earl A. Powell is director of the Los Angeles County Museum of Art and is a specialist in American art.

Painted in 1900 by Daniel Huntington, portrait of Morse hangs in the New York Chamber of Commerce.

A glittering replica of Sputnik is suspended from ceiling in the National Air and Space Museum.

The Soviet satellite left a trail across the sky in a time exposure made October 8, 1957, in Australia.

By Paul A. Hanle

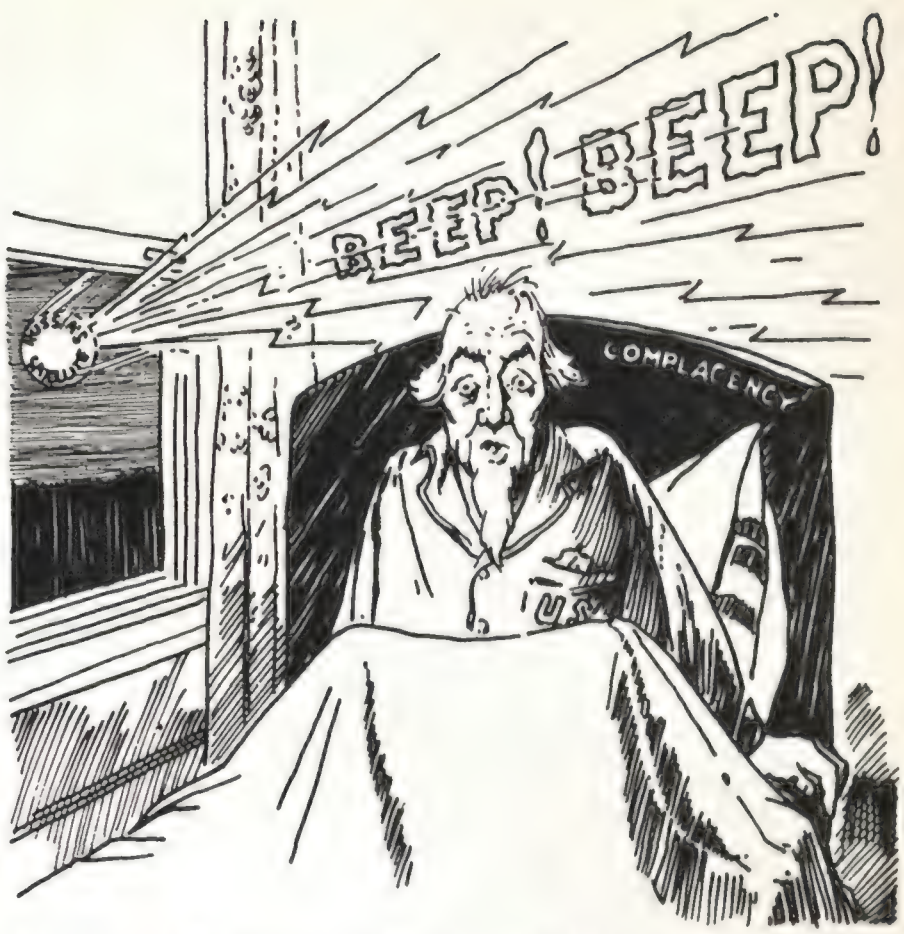
The beeping ball that started a dash into outer space

Twenty-five years ago the Russians rocketed the first man-made satellite into orbit. Today we still feel the impact of that simple transmitter

On October 4, 1957, the Soviet Union launched into orbit a 184-pound sphere carrying a radio transmitter, enough batteries to run it for about two weeks, and four car-radio-style antennas, swept back to conform to the shape of the nose cone in which it rode atop its launch vehicle.

James Van Allen remembers Sputnik differently from most Americans. On a South Pacific expedition aboard the Navy's U.S.S. *Glacier* to study cosmic rays for the International Geophysical Year (IGY) at the time of its launch, he heard the news on the Armed Forces Radio.

"Before I swallowed it, I wanted to personally confirm it," he recalled in an interview at the Smithsonian National Air and Space Museum (NASM). The ship's radioman picked up a signal at the right frequency, and soon Van Allen and his team were listening to Sputnik's steady beeping with astonishment at the strength of the signal. Checking its orbital period, the length of the passes during which the ship's receiver held the



Reaction of the news media is typified by cartoon published in *New York Times* on October 13, 1957.

signal, and the change in frequency of the signal as it passed like a fast-moving train, they convinced themselves that this was in fact the Russian satellite.

Sputnik demonstrated the muscle of Soviet rocketry, but the satellite was mainly for show: it carried no scientific instruments and took no measurements in space. The launch intensified a scientific and technological competition that continues to this day. The United States was close to a launch itself, and had intended all along to orbit apparatus that could measure and record the space environment. Scientists like Van Allen wanted to show, as did the government, that space could be used for peaceful purposes as well as for the missiles of war.

To appreciate the significance of Sputnik, one must look back at the international politics of the era. America was engaged in an intense rivalry with the Soviet Union, a competition that seemed to hold our very survival in the balance. Bellicose and petulant, Soviet Premier Nikita Khrushchev had declared that the socialist states would overtake the capitalists as world leaders in economic and technological development. His famous "We will bury you" remark could be taken by a jittery, polarized West as a direct military threat.

In this climate the launch of Sputnik reverberated throughout the country as few other events of the day. (Some of the excitement is captured in a new exhibit at NASM called "25 Years of Space Exploration." The space spectaculars are set against the background of what was happening in culture, politics and science.)

Interest was mixed with alarm. Asked if the satellite gave any military advantage to the Soviets, Fred L. Whipple, director of the Smithsonian Astrophysical Observatory, who played a key role in tracking the first satellites by organizing a volunteer effort called "Project Moonwatch," could not offer much reassurance: "It is not a military advantage as such, but it indicates the Russian potential in the area of missiles."

Far out at sea, Van Allen, who would play such an important part in the American response, could only guess what the American reaction would be, and his guess naturally centered on the response of the scientific satellite community. Inevitably there would be a reevaluation of this nation's satellite program. In his field notebook (to be cited in his book, *Origins of Magnetospheric Physics,* being published next year by Smithsonian Institution Press), he permitted himself some unscientific observations: "Confirms my disgust

Its nose cone beginning to topple, Vanguard blows up as nation watches.

with . . . decision to favor N.R.L. [the Naval Research Laboratory's Vanguard satellite] over the Redstone proposal of Sept. 1955!!"

He rued his own bad luck at being so far away from the action. But he could not suppress his excitement at the technological feat, writing at one point, "Weight 83.6 kilograms (Wow!)" and at another, "Brilliant achievement!" The thing was nine times heavier than the U.S. satellite would be, implying a gigantic launch vehicle, a point whose significance Van Allen understood perfectly well.

Cosmic-ray physicist James Van Allen was no newcomer to rocket research in 1957. Easygoing and self-effacing, he nevertheless always had strong ideas about space science. He had been given a priority position for his scientific experiment on the Vanguard project for the IGY. The position was natural, for his researches dated to the earliest efforts after World War II to send scientific payloads into space atop captured German V-2 rockets. In the late 1940s, an American rocket built to Van Allen's specifications, the Aerobee, carried his cosmic-ray experiments to about 70 miles altitude.

Moving to the University of Iowa in 1951, where he has remained ever since, Van Allen brought to reality the idea that a small rocket, lifted ten or 15 miles by a balloon, could then reach great heights by avoiding the aerodynamic drag of high-speed flight through the dense lower atmosphere. Van Allen's "rockoons" carried instruments 60 miles into space.

With this background, James Van Allen and his research associates presented an extraordinary combination of scientific achievement, recognition and hard engineering experience with rockets. But aboard the *Glacier* in early October 1957, Van Allen wondered if his experiment would really fly on Vanguard—or would all bets be

Personal privacy.

Everyone wants it. Everyone believes in it. And with so much personal information being stored in computers and other files, it has been of continuing concern to us at IBM.

So, a number of years ago we began to examine how personal information was being handled in our own house. Actually, our record was pretty good. But it wasn't good enough.

We discovered that we were collecting some information about people which didn't really relate to their jobs. And we concluded that one excellent way to protect people was to collect less information about them. So, we purged our files of non-essential data. And we stopped asking job applicants things such as age, where a spouse worked, credit references, etc.

We ask only what we need to know to run IBM, and only people who need to know it can see it. Information that's stored in computers is further protected by electronic safeguards built into the system.

What we've done so far isn't the answer for everyone. But it begins to deal with the question. IBM®

For a free copy of a new brochure on IBM's employee privacy practices, call 1-800-228-2028. Ext. 2070. (In Nebraska: 1-800-642-8300. Ext. 2070.)

The world's most beautiful calendars —dazzling, one-of-a-kind gifts

These coveted calendars feature color transparencies created by a *unique nine-color printing process.* Illuminated from behind, they instantly become breathtaking works of art and collectors' items!

TIFFANY TREASURES 1983
Glowing transparent reproductions of famous Tiffany Windows, 1893-1920. 12" x 22½".

OLD WORLD TREASURES 1983
Spectacular transparent reproductions of European stained-glass paintings from the Middle Ages. 12" x 19½".

$29.95 each, in durable gift mailer
Limited edition. To avoid disappointment, mail this coupon now.

FROMM INTERNATIONAL PUBLISHING CORPORATION S10
560 LEXINGTON AVENUE
NEW YORK, N.Y. 10022

Please send me____ copy(ies) of **Tiffany Treasures 1983** and/or____ copy(ies) of **Old World Treasures 1983** @ $29.95 each, plus $2.00 postage & handling. (*N.Y. residents add sales tax.*) If not satisfied, I may return the calendar(s) within 10 days for a full refund.

Enclosed is my ☐ check ☐ money order
Please charge my ☐ VISA ☐ Master Charge

_____ Exp. date_____

Signature_____
Name_____
Address_____
City_____ State_____ Zip_____

Vanguard's small payload, TV-3, would have been America's first satellite.

off in the aftermath of Sputnik? Even as he steamed toward Antarctica, he knew that there would be a clamor to intensify our efforts in space.

Although clearly uneasy about Sputnik "flying" over American cities several times a day, U.S. officials, taking their cue from President Eisenhower—who went golfing October 5—at first remained coolly resolved not to accelerate our own satellite launch program.

But the mood changed quickly. The press led a growing attack on American scientific complacency and the allegedly poor science education of the younger generation. *Time* assessed the status of U.S. science in its cover story of November 18, 1957, reporting that Russia was graduating more than twice as many scientists and engineers per year as was the United States. It concluded, "Now the U.S. has to live with the uncomfortable realization that Russia is racing with clenched-teeth determination to surpass the West in science—and is rapidly narrowing the West's shielding lead."

In the weeks after Sputnik, Eisenhower met with scientific advisers, including Detlev Bronk, president of

Paul A. Hanle is the chairman of space science and exploration at the National Air and Space Museum.

You can learn more about a new residential program for long-term psychiatric patients by writing for a color brochure entitled "Greystone House." This carefully renovated fieldstone house provides a home-like environment for a small group of residents. Situated on a 100-acre campus, Greystone House is under the guidance of America's first private nonprofit psychiatric hospital. Write Barbara Hines, R.N., Greystone House, Friends Hospital, 4680 E. Roosevelt Boulevard, Philadelphia, PA 19124.

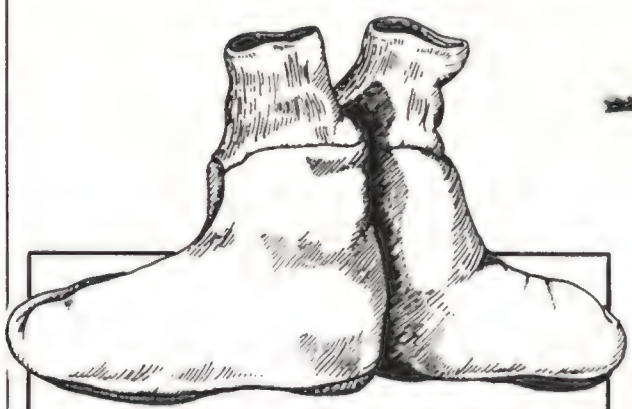
Four Centuries of Scientific Books & Instruments

Offering fine scientific instruments and rare books in the natural and physical sciences.

Fully illustrated and annotated. Catalog 12 – $5.00 first class mail.

The Antiquarian Scientist

P. O. Box 602
Amesbury,
Mass. 01913
(617) 388-2314



SUPER BOOTIES
keep the thermostat down!

New affordable fleece-like Pile Booties are so warm and cozy your feet will love them. Whether off on an exciting outdoor adventure... or lounging around home... these classics are guaranteed to please or we'll buy them back!

Colors: Tan, Navy.
Sizes: Order by shoe size. Specify Men's or Women's.

SUPER BOOTIES . . . . . $13.95ppd.

Circle One: Check/M.O., Visa, MC, Amex.

_____ $
Size Color Total

Name Print Initials

Address

City State Zip

Credit Card # Expir. date

☐ Send me a **Free Catalog** of unique outdoor clothing.

SANDIA SOFT-WEAR
1423 Sigma Chi Rd. N.E.
Albuquerque, N.M., 87106

Sandia soft-wear

Now you can shrink a $600 car repair down to $25.

Everywhere you look these days, it's $600 for a transmission job here, $400 for engine repairs there.

It's gotten to the point where even the remote possibility of major repairs is enough to worry anyone.

Until now.

Because now you can cut those worries down to a more manageable $25. And keep them that way for up to five full years.

Introducing the Ford Extended Service Plan—for purchasers of Ford or Lincoln-Mercury cars or light trucks.

Here's how it protects you.

The Extended Service Plan covers thousands of parts, including major repairs. And promises no parts or labor charges, except a small $25 deductible each time you bring your car in. No matter how many different covered parts need to be fixed.

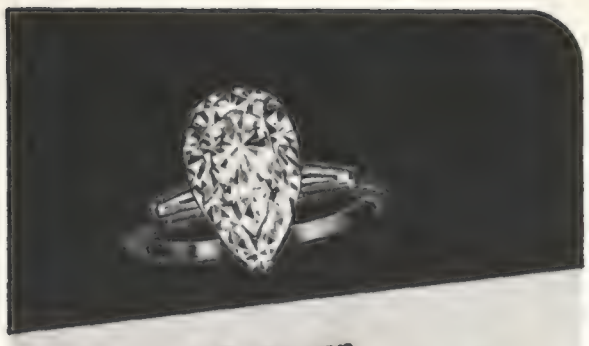
Which means you can go to any one of 6,300 Ford or Lincoln-Mercury Dealers across the U.S. and Canada, and the most you'll pay is $25 for any covered repairs.

Plus there's much more. With plans ranging up to 5 years/60,000 miles of maximum protection. See your Dealer for all the details on how to shrink car repair worries down to size.

Ask for the Extended Service Plan by name. It's the only one backed by the Ford Motor Company.

Get it together—buckle up.

Ford Extended Service Plan



The "diamond" you can afford to lose!

A Kenya® Gem isn't a diamond... but you're the only one who needs to know that. What you and admiring glances will see is the incredibly true, blue-white lustre and brilliance of this gem which, amazingly enough, is priced from just $75 a carat.
A truly striking variety of mens' and womens' styles and settings are available in 14K white or yellow gold ... priced to lose...

but you won't want to.

Send for free full color catalog today:

Name_____

Address_____

City_____

State_____ Zip_____

Major credit cards accepted
KENYA Division, SM-1082
Day & Frick, Inc.
1760 N. Howard Street
Philadelphia, PA 19122
®Trademark of Day & Frick, Inc., Est. 1866

J.M.W. TURNER OFFER

Castle Upnor, Kent: (22 X 18 in.)
Painted 1830: Private Collection England.

Superb quality colour print of a strikingly beautiful Turner watercolour. Warships lie at anchor silhouetted against the setting sun, while in the foreground fishermen prepare for the homeward journey as evening sets in. Art historian John Ruskin wrote, "This is a wonderful example of Turner at the peak of his powers."
Just one thousand copies of this painting were printed in England to commemorate Britain's Maritime History Year. We have every one of them. There will be no more available once these few are gone.

Print $16 (Framed $59.90)
Calif. rsidents add 6½% tax. Tel. (213) 452-2443

OXFORD GALLERIES
2210 Wilshire Blvd., Suite 627
Santa Monica, CA 90403

Name_____

Address_____

City_____ State_____ Zip_____

☐ VISA ☐ M.C. #_____ Exp. _____

the National Academy of Sciences, and those working for the Office of Defense Mobilization. It was at Ike's meeting with this advisory committee on October 15 that chairman I. I. Rabi raised the idea of creating the post of Special Assistant to the President for Science and Technology. This led to Eisenhower's appointment of James R. Killian, president of MIT, to the post.

In less than five months, Killian and his advisers put together a blueprint for space exploration for the next two decades. Called "Introduction to Outer Space," it described what was to come: hard, soft and manned landings on the moon; robots' journeys to Mars and the other planets; the measurement of the Earth's gravity and magnetic field; a space-based test of Einstein's General Theory of Relativity; tests of how life gets on in space. Satellites that look both downward and upward—meteorological and astronomical types—were predicted, as were communications satellites for "intercontinental

Army team in 1956 (counterclockwise from top left) was Holger Toftoy, Ernst Stuhlinger, Hermann Oberth, Wernher von Braun and Robert Lusser.

With this free wok offer from Jenn-Air, you'll make dishes just like mama-san used to make.

Shrimp Tempura. Almond Chicken. Beef Teriyaki. Our exclusive new Wok accessory brings the exotic flavors of the Orient into your home.

And right now, this $100 value won't cost you a cent.

Just buy any Jenn-Air cooking system* before November 30th and it's yours.

Think of all the options you'll have at your fingertips. A Jenn-Air lets you char-grill steaks and burgers indoors.

Switch from radiant to convection cooking.

And choose from the widest array of accessories available.

So see your participating Jenn-Air dealer today for a free demonstration and exciting recipe ideas. He's listed in the Yellow Pages.

Jenn-Air. The finest cooking system ever created.

©1982 Jenn-Air Corporation. Jenn-Air is a registered trademark of Jenn-Air Corporation.

*Any freestanding, built-in or drop-in Grill-Range or cooktop/selective-use wall oven combination.

Our handy knife-rule fits as neatly in your pocket as it fits your needs.

You've never owned anything like this. Not only is it a stainless steel pocket knife that's just 3" long and 3/16" thick when closed—with two blades of fine Sheffield steel. It's also a 6-inch precision rule engraved by Rabone-Chesterman of England, who are known the world over for precision rules. But, the best part of all? You don't have to go any further than your pocket for it.

Send for the Garrett Wade Knife-Rule and our introductory catalog. It's full of fine woodworking tools.

Garrett Wade Co.,
Dept. 105
161 Ave. of the Americas
New York, N.Y. 10013
Please send me _____ pocket knife-rule(s) @ $29.90 p.p.d.
plus introductory Garrett Wade Catalog.

☐ Check/Money Order enclosed.
☐ Visa/Master Charge/American Express.

Card No._____ Expires_____

NAME_____

ADDRESS_____

CITY_____

STATE_____ ZIP_____

television." Even reconnaissance satellites, whose use in monitoring arms agreements was a state secret until 1978, were foreseen in this policy-making report.

These predictions would materialize as the projects of the 1960s and '70s: Ranger, Surveyor and Apollo to the moon; Skylab; Mariner, Pioneer, Viking and Voyager to the planets; the Explorers, Orbiting Astronomical Observatories, and other scientific satellites; sensing and communications satellites such as TIROS, Nimbus, Marisat, Intelsat and Landsat—a scientific and technological explosion that has spawned a whole industry. In

The Army's Jupiter C successfully launches Explorer I on January 31, 1958.

Mystery Electronic Top

Greatest New Gadget In Years!

Handsome Gift Box

Spins for days on Invisible Power

Unique Christmas Gift

What Makes It Go On and On at 2500 r.p.m. with no apparent energy source? **BAFFLING BRAIN BUSTER that BUGS the BRIGHTEST.** The higher their IQ the more puzzled they are. Examine it, start it, stop it or whatever. **Perpetual Motion solved at last? Psychic Power? Anti-Gravity? Scientific Breakthru from Space?** The answer to spaceships & UFO's? Magic, Mystery & Science combined. Entertain friends & fool wise guys. Spins for days on **Invisible Wireless Power that you can defy anyone to See, Understand or Explain!** Beautifully made with plastic base and saucer-shaped spinner. Practically indestructable. Secret scientific explanation included. **Orders shipped promptly. Money Back Guarantee. Send check or money order for $9.95 each. Add $1.25 shipping & handling. Save: Get 3 for $28.50 plus $1.50 shipping; 6 for $53.75 plus $2.00 shipping. Master Charge or Visa accepted by mail or phone. Give card number & expiration. Phone: (313) 791-2800. Johnson Smith Co., Dept. 6810,, Mt. Clemens, Mich. 48043.**

SAMPLE **CAT FANCY**

A copy of the world's most beautiful and widely read monthly magazine about cats and kittens can be yours for only $1.00 to cover postage and handling. (Each copy sells for $2.00 at the newsstands.) This is a limited time offer so reserve your copy NOW!

Send to: **CAT FANCY** Dept.SM10. P.O. Box 4030 San Clemente, CA 92672

From **Le Bestiaire** *Guillaume, 13th cent.*

TEN EXQUISITE UNICORN NOTECARDS
Burgundy on white, with envelopes
Without greeting, 5" x 7", 7.95 ppd.
FREE: 2 bonus cards with first order
plus our catalogue of museum replicas and craftworks. Satisfaction guaranteed.

CAMBERMAN'S
Fine Art Reproductions
1563-05 Stine Road
Peninsula, Ohio 44264

FAMOUS
BLACK DUCK wild rice!
WITH GOURMET RECIPES

Fall Crop Now Being Harvested From the Heart of Real Wild Rice Country!

Enjoy the pick of the fresh new vintage crop the way real gourmets do—with fowl, game or beef. Genuine 100% Pure Fancy, Long Grain—rare and specially roasted...*absolutely no white rice "mixed in."* If you tried to buy sumptuous Wild Rice like this in stores you'd have one hard time finding it! We deal with you direct, no middlemen involved. You get "the very best"—***The wildest Wild Rice there is***...with that "nutty" flavor that makes Black Duck the delicious treat it is! Comes with delightful recipes for festive dining. Try it and see!

¼ LB. SAMPLE (Enuf for 6) $3

SPECIAL OFFER COUPON

Black Duck Store, 420 S. River Drive
St. Paul, Minn 55105 Dept. # 30

Please send, **postage *free:***
☐ ¼# Trial Size *(Enuf for 6)* **$3**
☐ _____ pounds @ $9.95 per pound

Name_____

Address_____

City_____ State_____ Zip_____

☐ Check Enclosed ☐ Money Order

A Landmark From Wedgwood For Christmas.

Shown smaller than actual size of 8.25″ diameter. Issue price just $32.50. After December 31, 1982, this plate will never be produced again.

The 1982 Wedgwood® Queen's Ware Christmas Plate.

What is it about the annual Wedgwood Christmas Plates that has made them so popular throughout the world? Perhaps it is because there's nothing quite so merry as the Christmas in England that they celebrate each year. Picture it—a cheery fire in the grate, a fat goose in the oven, puddings steaming away and gaily wrapped gifts stacked 'neath the tree. Certainly one of them will contain the Wedgwood Queen's Ware Christmas Plate. And, just as certainly, the one who receives it will treasure it for a lifetime.

England's landmarks painted by an English master.

Each year, the Wedgwood Queen's Ware Christmas Plate offers a center design of a great English landmark painted by the noted British artist, Alan Price. For 1982, Price has depicted Picadilly Circus, that most-famed of London's street junctions with its lovely monument, Sir Alfred Gilbert's "Angel of Christian Charity." The scene is reproduced in detailed full color as is the delicate border design of holly leaves and berries.

The pottery that delighted a Queen.

Measuring 8.25 inches, the plate is made of Wedgwood Queen's Ware, the creamy glazed earthenware which Josiah Wedgwood invented in 1763. After commissioning several services of this ware, Queen Charlotte of England granted Wedgwood her warrant to call it thereafter "Queen's Ware." Production of Wedgwood's Queen's Ware Christmas Plates is limited to the year of issue. Not a single one can be made after December 31 regardless of demand.

Dedicated to those who love Wedgwood.

The Etruria Hall Collection has been privileged to offer many Wedgwood special and annual edition works as agents for the U.S. We are pleased to assure delivery of your 1982 Wedgwood Queen's Ware Christmas Plates in plenty of time for holiday giving if your order is mailed promptly. Send the coupon below to the Etruria Hall Collection, Box 12052, Church Street Station, New York, NY 10249.

THE ETRURIA HALL COLLECTION
P.O. Box 12052, Church Street Sta., Dept. SM
New York, New York 10249

Payment is enclosed for _____ Wedgwood Queen's Ware Christmas Plates @ $32.50 each. I have added a postage and handling charge of $2.50 per plate and applicable sales tax of _____ % for a total of $_____.
Or Charge: ☐ VISA ☐ MasterCard

Account #_____

Signature_____
(charge only)

Name_____

Street_____

City_____ State_____ Zip_____

(Residents of New York and California please add appropriate State and Local taxes.)

"Wedgwood" is a U.S. registered trademark of Wedgwood plc of Barlaston, Stoke-on-Trent, England.

FREE BANK BOOK OF SAVINGS.

Send for 88-page catalog of fine traditional clothing for men and women.

Shop conveniently at home or office, from our full-color catalog. It's brimming with classic clothing and accessories. Everything is priced far below most fine stores, and your satisfaction is unconditionally guaranteed.

J.S. A. Bank® Clothiers

109 Market Place/Baltimore, MD. 21202
(301) 837-8838

Please send free catalog to:

Name _____

Address _____

City _____

State _____ Zip _____

©1982 BAN

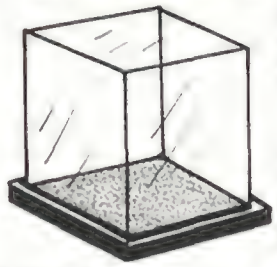
"To Life" from "Fiddler"

21" bronze by J. Lukens Methfessel

Signed and numbered with foundry mark
Edition of fifty
$1,800

J.L. Methfessel
Dogwood Lane
Gwynedd Valley, PA
19437
215-646-0528
(collect)

DISPLAY CASES



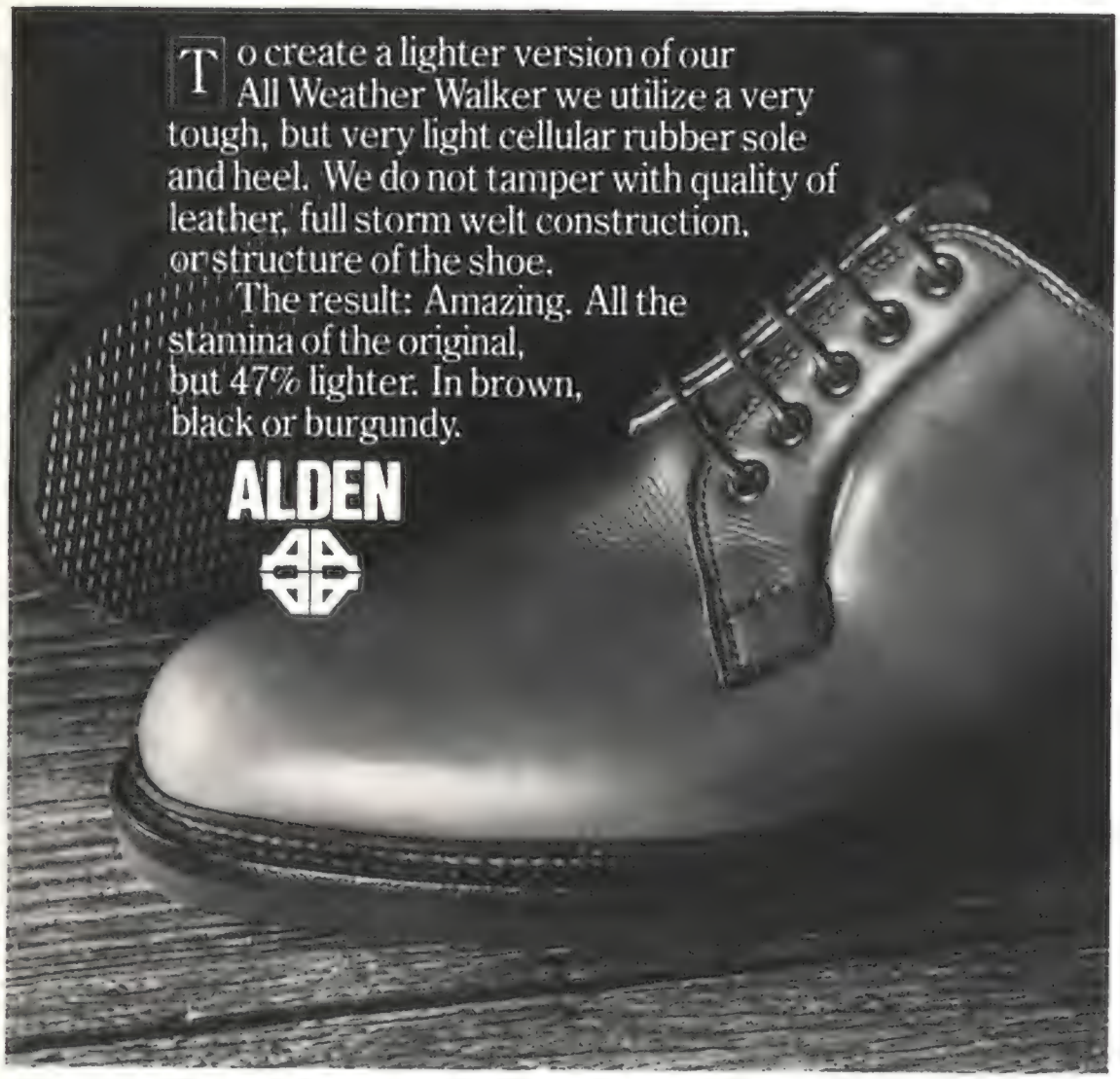
PROTECT AND DRAMATIZE YOUR PRECIOUS WORK OF ART

CUSTOM MADE
clear lucite on black lucite base

SEND DIMENSIONS • LENGTH • WIDTH AND HEIGHT • WE WILL QUOTE PRICE

SATISFACTION GUARANTEED
THE ART DISPLAY CO., BOX 880
EXMORE, VIRGINIA 23350

NOT UNDERWEIGHT, JUST WELTERWEIGHT.


To create a lighter version of our All Weather Walker we utilize a very tough, but very light cellular rubber sole and heel. We do not tamper with quality of leather, full storm welt construction, or structure of the shoe.
The result: Amazing. All the stamina of the original, but 47% lighter. In brown, black or burgundy.
ALDEN

For store listings and illustrated brochure write Alden Shoe Co., Dept. 10S, Middleboro, Ma. 02346.

At the Explorer I news conference, scientists (from left) William Pickering,

late 1957, however, before this plan was even drafted, the nation's first priority in space was to get a satellite into orbit as soon as possible.

The United States had been rumbling, like a volcano about to erupt, with the fire and smoke of its own launch vehicles when Sputnik went up. In July 1955 the nation had committed itself to launching a satellite during the IGY. Three proposals were considered. The Air Force's Atlas would become a mighty intercontinental ballistic missile and could place perhaps half a ton or more into orbit. But it was not yet ready and could not be diverted from its military role anyway. The Army's modified Redstone Orbiter and the Naval Research Laboratory's Vanguard remained to compete head to head.

Deliberating on the pros and cons of each in the late summer of 1955, a scientific panel headed by Homer J. Stewart of Caltech chose Vanguard for the first American satellite launch. This would be a civilian space effort and would be protected from further competition with the Army and the Air Force. Two successful launches of first stages moved Vanguard toward a

James Van Allen and Wernher von Braun raise high a model of the satellite.

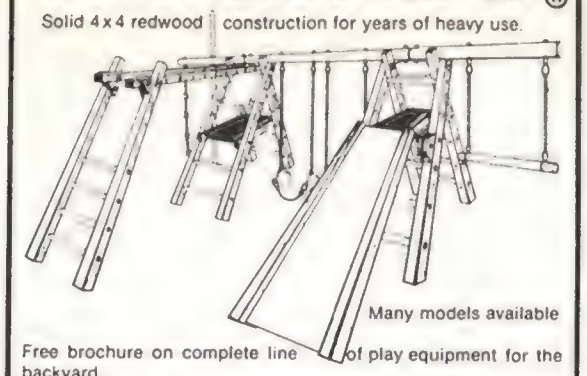
late October test in full configuration. But Vanguard had fallen behind schedule, in part because of underfunding, and a satellite launch was still months away on October 4.

The Orbiter, no longer in the running for use as a satellite launcher in 1955, was being developed as Jupiter C for testing the reentry of warheads from space—a way to keep the satellite project in the works as well. Although Jupiter C was a workable four-stage launch vehicle, which proved itself in a successful flight with an inert final stage in September 1956, Redstone developer Wernher von Braun had been ordered not to launch a satellite at that time, partly to avoid stealing the thunder of the civilian team. So the Jupiter C was only a potential satellite launch vehicle when Sputnik went into orbit.

Van Allen was in the South Pacific when Sputnik went up, but William Pickering, director of Caltech's Jet Propulsion Laboratory in Pasadena, and von Braun, the courtly, articulate developer of the V-2 and head of the rocket team based in Huntsville, Alabama, took hold of the situation in his place. Quickly they set about

WOODPLAY®

Solid 4x4 redwood construction for years of heavy use.



Many models available

Free brochure on complete line of play equipment for the backyard.

WOODPLAY, INC./P.O. BOX 27911/RALEIGH, N.C. 27611/919-832-2970

rowantrees pottery

condiment set

Individuality from the secrets of Nature and the skill of hands.

A touch of beauty from Maine for your table. Hand decorated blueberries skillfully formed on the jam jar cover. Available in 10 unique formula glazes. Send $1.00 for color brochure & price list refundable with order.

4 Union St., Blue Hill, Me. 04614 (207) 374-5535

CRUISE TO THE WORLD'S HIDDEN CORNERS.

Visit penguin rookeries in Antarctica and isolated tribal villages in New Guinea. See the monuments of Burma and Sri Lanka and the ritual dances of Indonesia. Study the profusion of birds in the Seychelles and the exotic marine life of the Great Barrier Reef.

Learn from our accompanying lecturers and expert guides.

Our 120-passenger WORLD DISCOVERER is unique, with a combination of expedition capabilities, special landing craft, and traditional cruise amenities.

The Amazon • Antarctica • New Guinea
Singapore-Burma-Sri Lanka-Seychelles
Great Barrier Reef • Indonesia • Arabia
Iceland/Greenland • Morocco and West Africa
121-Day "Journey to Seven Continents"

14 to 121 Days. From $4,500 to $62,000

Please send me your 48-page catalog.

Society Expeditions CRUISES

Dept. SM8210W 723 Broadway East, Seattle, WA 98102

Name

Street

City/State/Zip

M.S. World Discoverer Registered in Singapore.

The Mark of a True Book Lover

AVAILABLE BY MAIL ONLY
Sale! SAVE 25%

Thousands sold at $20 or more!

Now Only $14.95 EACH

ACTUAL SIZE

This is the same heavy duty, chrome plated embosser used by librarians to mark and identify books.

Now you can have one with your own name and initials on a 1½" diameter seal. It's easy to use. . . insert the page, squeeze the handle and "LIBRARY OF (your name)" and initials will be clearly embossed (see photo).

This quality embosser is fully guaranteed and comes with a handy storage pouch.

Since this item has to be personalized, please allow 3 to 5 weeks for delivery.

How do you want your seal to read? INITIALS

Print name and initials exactly the way you want them to appear.

NAME

For additional embossers, simply print names and initials on a separate sheet of paper.

Check One

☐ A check or money order is enclosed
☐ Please charge this purchase to:

Account #

MasterCard

4 digits above your name

Exp. Date _____ Signature _____

BARNES/SALE & NOBLE/ANNEX
126 FIFTH AVENUE DEPT. E 440
NEW YORK, N.Y. 10011

Please send me _____ embosser(s) at only $14.95 each plus $1.75 each for postage and insurance. (N.Y. and N.J. residents: Please add sales tax.)

Name

Address

City

State _____ Zip _____

Offer good only in the continental U.S.A. 0038158

© 1982, Barnes & Noble Bookstores, Inc.

Better Than Jogging

NordicTrack

Jarless Total Body Cardiovascular Exerciser Duplicates X-C Skiing for the Best Motion in Fitness

The enjoyable sport of cross-country skiing is often cited by physiologists as the most perfect form of cardiovascular exercise for both men and women. Its smooth, fluid, total body motion uniformly exercises more muscles and higher heart rates seem easier to attain than when jogging or cycling. NordicTrack closely simulates the pleasant X-C skiing motion and provides the same cardiovascular endurance-building benefits—right in the convenience of your home. Makes a year round, consistent exercise program easily attainable. Eliminates the usual barriers of time, weather, chance of injury, etc. Also highly effective for weight control.

Better Than Running

NordicTrack gives you a more complete workout. Conditions both upper body and lower body muscles at the same time. Fluid, jarless motion will not cause joint or back pains as jogging or running often does.

More Effective Than Exercise Bikes

NordicTrack's stand-up skiing motion more uniformly exercises large leg muscles and also adds important upper body exercise. Higher pulse rates, necessary for building fitness, seem easier to attain because the work is shared by more muscle mass. The NordicTrack also keeps more muscles in tone.

Even Better Than Swimming

NordicTrack more effectively exercises the largest muscles in the body, those located in the legs and buttocks. These muscles' main function is to lift and propel the body in the standing position. However, when swimming, the body is supported by the water, thus preventing these muscles from being effectively exercised. The stand up exercising position on the NordicTrack much more effectively exercises these muscles.

A Proven, High Quality Durable Product

Ruggedly constructed, NordicTrack is quiet, motorless and folds compactly for storage. Separately adjustable arm and leg resistances. NordicTrack is in its 6th year of production and is used in thousands of homes and many companies. We manufacture and sell direct. Two year warrantee, 15 day trial period with unconditional return privilege.

For more information write or call

TOLL FREE 1-800-328-5888

8 AM-5 PM MON.-FRI.
PSI 124 H Columbia ct. Chaska, MN 55318
Minnesota 612-448-6987

convincing the Army and the government that Jupiter C should be made a backup to Vanguard, in spite of the President's earlier wish to keep the space program free of military connections. The Soviet success had changed the atmosphere. Seeing both need and opportunity, the Department of Defense gave the go-ahead three weeks after Sputnik.

Pickering, an unflappable New Zealander, sent a radiotelegram to the one scientist, Van Allen, who had had the foresight (or prudence) to design his experiment to fit both Vanguard and the Jet Propulsion Laboratory's satellite, Explorer. In early November, von Braun promised that he could launch a U.S. satellite within 90 days. The goal was to launch by January 29, 1958, and no time could be wasted. Van Allen agreed to Pickering's proposal on November 14. The bargain was struck.

Van Allen moved his experiment just in time. On December 6 an attempted launching of Vanguard turned into televised humiliation when the rocket exploded on the pad (p. 150). The Vanguard team continued working toward another launch in late January, but meanwhile the Army was quietly building up its Explorer program.

By agreement among Van Allen, Pickering and the Army, there would be three Iowa payloads on three dif-

Cartoon expressed Uncle Sam's relief at the successful Explorer I flight.

Anyone for Tenons?

If your racket is tenons, doubles or singles, and you want a perfect match every time, you can learn from the professionals. They know a classic way to join two pieces of wood together is with a tenon that fits into a mortise.

Fine Woodworking magazine speaks this language to more than 200,000 readers—people seriously interested in making beautiful things out of wood. Whether you are an aspiring novice or an accomplished expert, you'll find it an especially informative magazine, with finely detailed articles about techniques and tools, materials and design. It's written by master craftsmen who share their many years of woodworking experience. And it's printed on heavy paper to withstand years of reference. All back issues are in print and indexed periodically.

If you want to become a better woodworker, send $14.00 for a one-year subscription (6 issues). Or call us toll-free, 1-800-243-7252, to charge your order (Ct. residents call 1-426-8171). If you're not pleased, we'll be happy to refund.

Fine WoodWorking

The Taunton Press
52 Church Hill Rd.
P.O. Box 355MW
Newtown
Connecticut 06470

FINE ENGLISH GARDENING TOOLS

Smith & Hawken offers the finest hand-crafted English gardening tools: forks, spades, hoes, trowels, shears, rakes, and more.

SMITH & HAWKEN TOOL COMPANY

Free 32-page mail order catalog of quality tools.

68 Homer, Dept. S33, Palo Alto, CA 94301

Perfect Fit–by Mail! We guarantee it!

- 45 men's styles; AAA to EEE, 6½ to 16.
- Unsurpassed comfort.
- Top quality standards maintained for 105 years.
- Prompt delivery.
- Money back guarantee.

SEND FOR FREE CATALOG

Executive Shoes, Dept. 1762, Box 488
Brockton, MA 02403

Send FREE catalog of Wright Arch Preserver Shoes

Name

Address

City State Zip

WE HAVE SOME GRAND DESIGNS FOR YOUR FUTURE.

By building a collection of U.S. stamps, you can become the architect of experiences that will stay with you forever.

And since October is National Stamp Collecting Month, what better way to begin than to put a block of four stamps commemorating the architectural genius of Wright, Gropius, Saarinen and Mies van der Rohe under your roof.

This is the fourth in a series of stamps that have honored American architecture.

But they're just one small part of what you can hope to discover with stamps.

Every few weeks there are new U.S. Commemoratives that let you take an active part in our country's history. Explore our natural beauty. Or get close to our nation's heroes.

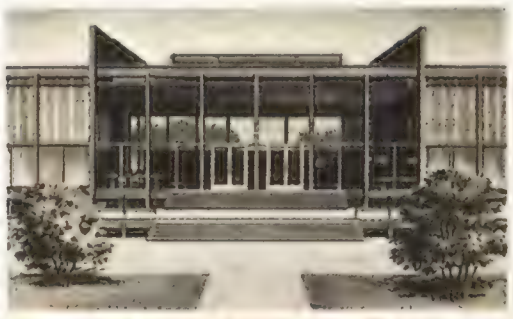
So come to the Post Office. And lay the foundation for a hobby that can last a lifetime.

U.S. Postal Service

© USPS 1982

Frank Lloyd Wright 1867-1959 Fallingwater Mill Run PA

Architecture USA 20c



Mies van der Rohe 1886-1969 Illinois Inst Tech Chicago

Architecture USA 20c

Walter Gropius 1883-1969 Gropius House Lincoln MA

Architecture USA 20c

Eero Saarinen 1910-1961 Dulles Airport Washington DC

Architecture USA 20c

Thirsty Terrycloth Robe

This incredibly comfortable bathrobe soaks up water fast to keep you warm and dry. Perfect after swimming or showering.

100% cotton, full length, 48". White, light blue, navy, beige. Men's sizes: S-M-L-XL. $48.

Please send me _____ terry robes @ $48.

Sizes/Colors_____

Name_____

Address_____

City_____ State/Zip_____

☐ Please send catalogue.

☐ Check Enclosed ☐ VISA ☐ MC ☐ AMEX

Acc't #_____ Exp. Date_____

Add $3 delivery/Calif. residents add 6% sales tax.
Order toll free outside Calif. 800-227-3050

Bullock & Jones SINCE 1853

340 Post St., San Francisco, CA 94108
(415) 392-4243

In New Mexico, observers follow satellite with special camera deployed by Smithsonian Astrophysical Observatory.

ferent vehicles. The first was essentially a Geiger counter to measure cosmic radiation, and a radio transmitter to get the measurements back to Earth. This payload was the same as the planned Vanguard experiment, but without a tiny tape recorder to store the data when the satellite was out of range of radio ground stations.

The second and third payloads carried the same components as the first, but with the tape recorder as well, which would prove crucial to the scientific success of the experiments. For each 95-minute orbit the recorder could store the measurements, then play them back in six minutes to a ground station as the satellite passed overhead.

The Jet Propulsion Laboratory called the plan to fly the first payload on schedule, but without the recorder, "Deal I," and to fly the next two missions, *with* it, "Deal II." For the Iowa team, the terms soon came to mean the payloads themselves.

Explorer I, with Deal I, went up late on the evening of January 31, 1958. The public uproar that followed astonished Van Allen. Led into a 1:30 A.M. press conference at the National Academy of Sciences with von Braun and Pickering, he found a room full of reporters and photographers (pp. 158-59). Van Allen remembers: "I wasn't cynical about it. We were treated like the heroes who raised the flag over Iwo Jima, sort of temporary heroes, rescuing the honor of the United States in this great Cold War with Russia by having a successful satellite."

We turned a lot of pants inside out before specifying the trousers in the Lands' End Charter Collection

Before electing to get into traditional clothing, we asked ourselves some hard questions, the kind you owe it to yourself to ask, next time you shop for a pair of slacks...

What should a really good trouser have? How should it be made?

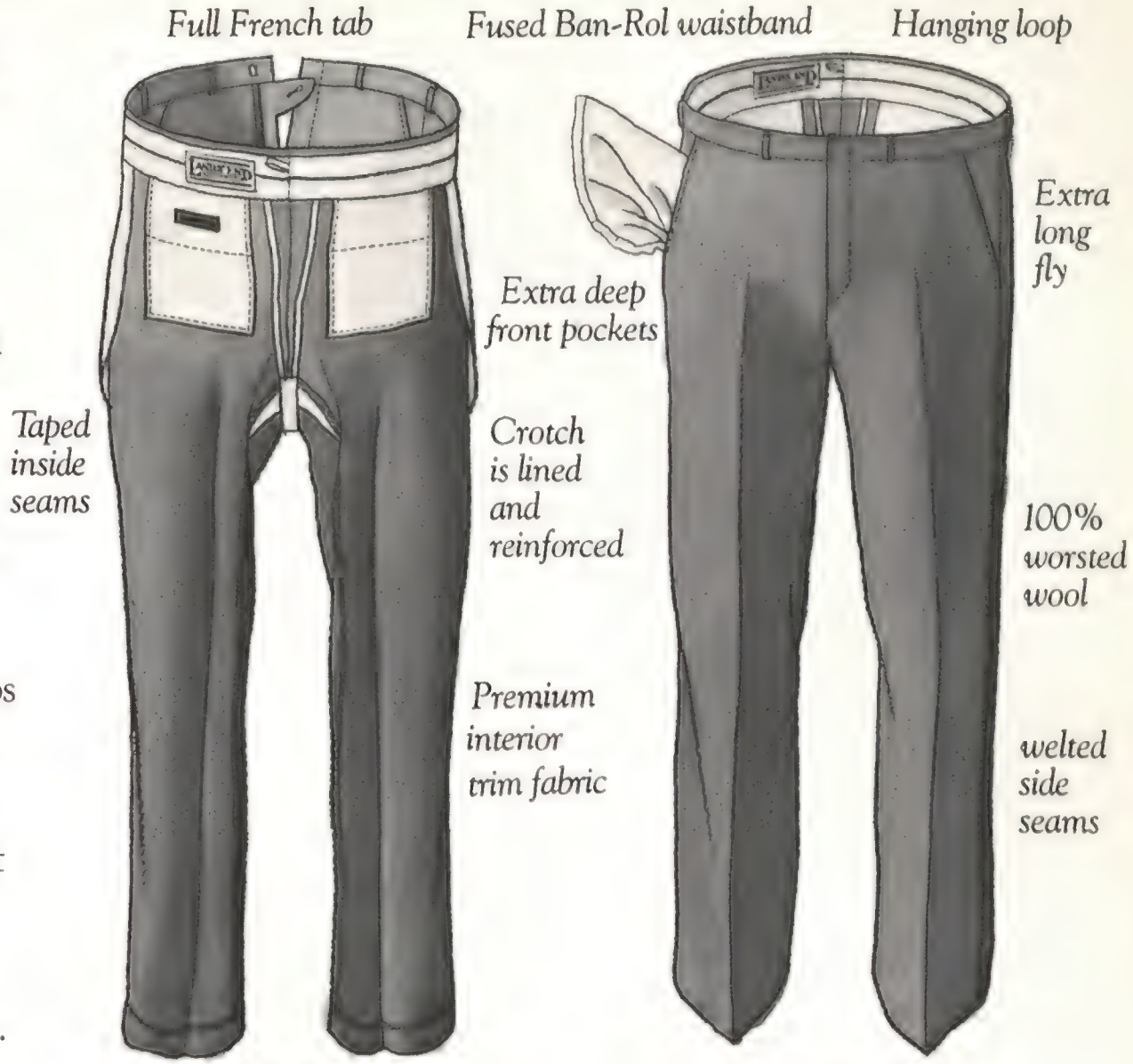
Our findings and what we did about them.

- ☐ We found most front pockets are too shallow at 12 inches. (Ours are now 13.)
- ☐ Most watch pockets with flaps are too bulky. (Lands' End watch pockets have no flaps.)
- ☐ A quality pocket fabric prolongs trouser life. (We don't cut corners here.)
- ☐ Trousers tend to sag in the center of the back. (We've added an extra center belt loop. Plus a "locker loop" for noontime racquetball players.)
- ☐ Expensive pants shouldn't have ragged interior seams. (We tape ours, and reinforce the crotch seam while we're at it.)
- ☐ A curled waistband looks sloppy. (Ours has Ban-Rol and, because neatness counts, our trousers have ¼-inch welted side seams.)

A kind of breakthrough.

None of the above items in itself is a major improvement, but to put them all into one pair of pants is some sort of breakthrough—even if we priced them at $70 to $80.

Yet these features are yours in the Lands' End Charter Collection priced from $39.50 to $49.50. If you take the time to comparison shop, you'll find that's a little astonishing.



Not one fabric, but four.

We offer three 100% worsted wool fabrics—flannel, gabardine and tartan plaid. Plus: a 55/45 tropical worsted.

As always, our objective has been a simple one. To be sure we're offering *quality*, at a reasonable *price*, that we can support with proper *service*. Backed by an unconditional *guarantee*.

Try us. Send for a catalog. Better still, call our 24-hour toll-free number: 800-356-4444.

You'll find that, along with our trousers, we'll turn ourselves inside out to serve you.

LANDS' END
DIRECT MERCHANTS

of fine wool and cotton sweaters, Oxford button-down shirts, traditional dress clothing, snow wear, deck wear, original Lands' End soft luggage and a multitude of other quality goods from around the world.

☐ **Please send free 92-page catalog.**

Lands' End Dept. B-10
Dodgeville, WI. 53533

Name _____

Address _____

City _____

State _____ Zip _____

Or call Toll-free

800-356-4444

(Except Wisconsin, call 608-935-2788)

SOLID BRASS
THE WALL SWINGER

$19.99

Add $3 Shpg. ea.

Factory to you . . . we make the world's greatest values!

3-way light

An essential addition for any room in your home. This functional and versatile lamp extends two feet and comes complete with 11½" dia. textured white shade. Your choice of polished brass or mellow antique finish (please specify). *Satisfaction a promise.* Mastercard or VISA accepted Order #90.

Nothing else looks like hand polished solid brass!

ROBELIER

1500 South 50th St.
Phila., Pa. 19143
Dept. ST10-2

with luxe cord cover

Quantity	Finish	Price Each	Total
#90		$19.99	
☐ Mastercard	PA res. 6% tax		
☐ Visa	shipping ea.	$3.00	
☐ Check		TOTAL	

_____

Signature _____ Ex. date _____

Name _____

Address _____

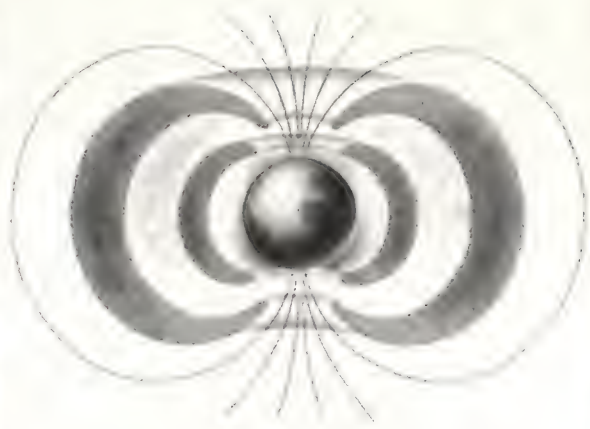
City _____ State _____ Zip _____

"SOME MEN STILL CALL THEIR OWN SHOTS"™

The INTERNATIONAL MALE Catalog/Magazine is different. Practical yes. But also exciting, unique and original. Greek tops, New Zealand jackets, Italian silk ski underwear, Chamois shorts, Japanese fabrics, Swiss Army shirts, British flannel sheets, Foreign Legion clothes plus activewear, shapeup & grooming and lots of international underwear. It's all location photographed in full color on top models in a brisk 52-page magazine format. Join half a million aware men around the world. For a FREE *current* issue, call or write: INTERNATIONAL MALE, Dept. 6349, 2802 Midway Drive, San Diego, CA 92110. Or call: 714-226-8751

INTERNATIONAL MALE®

WHERE WOMEN ALSO LOVE TO SHOP FOR MEN



In 1958, Explorers I and III discovered the inner of Earth's radiation belts.

While Sputnik was a massive, beeping, but otherwise inert, sphere that mainly demonstrated the powerful launch capacity of Soviet missiles, the U.S. satellites were to show superior scientific capability. "It was very deeply imbedded in the whole U.S. posture with respect to producing satellites that they were to be nonmilitaristic. As part of the IGY compact . . . they were to be scientific," Van Allen recalls. It was extremely important for the Jupiter C, a modified Intermediate Range Ballistic Missile (IRBM), to carry a scientific payload and help America maintain this peaceable posture.

Because it carried no recorder, Explorer I produced meager data that raised a lot of questions. It appeared to show gaps in the radiation surrounding the Earth. Indeed, at one point, Pickering believed that the apparatus was not working.

Explorer II should have provided the answers when it went up just over a month later—but it came right down again. The final stage of the rocket had failed to ignite and the payload fell into the sea.

Explorer III went off without a hitch, achieving orbit on March 26, 1958. It carried the recorder that would be so important in understanding the data from Explorer I.

Explorer III resolved the situation. The first continuous observations of radiation, played back from the recorder on Explorer III, arrived in

Wilbur's delectable collectible.

It's a faithfully reproduced replica of Wilbur's old-time cocoa tin, just like the ones common in turn-of-the-century stores. **AND** . . . it's filled with 1½ lbs. of luscious Wilbur Buds® in your choice of Dark Sweet Chocolate or Milk Chocolate. Americana never tasted this good!

$9.95 Delivered Price

Wilbur Buds® Since 1884

A great gift idea — order now for Holiday giving!
(use coupon below)

Mail to: Wilbur Chocolate Company, Inc.
48 N. Broad St., Dept. 3
Lititz, PA 17543

YES! I'm ordering _____ Wilbur old-time cocoa tins and Buds @ $9.95 each (price includes shipping and handling)

I'D LIKE THE FOLLOWING BUDS FLAVOR(S) (indicate quantity of each in box):

☐ Dark Sweet Chocolate ☐ Milk Chocolate
☐ Send Free Catalog

TOTAL OF MY ORDER $_____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

MY PREFERRED METHOD OF PAYMENT:

☐ Check ☐ Money Order
(Please enclose; sorry, no C.O.D.'s)

Charge to:

☐ VISA ☐ MasterCard

(Account Number) _____

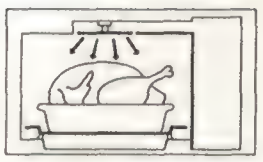
(Expiration Date) _____

ONLY TOSHIBA GIVES YOU THIS MUCH LEG ROOM.

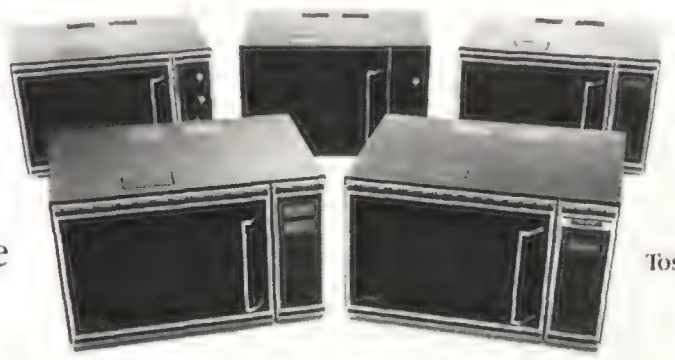
If you're looking for the microwave ovens with the roomiest interiors, Toshiba is the only name to consider.

With 1.6 cubic feet of cooking space, you'll not only get enough leg room for an 18 lb. turkey, you'll also have enough room to seat six cornish game hens comfortably.

There are five different models to choose from (all with the same 1.6 cubic feet of space.) And they all come with Toshiba's new "Power Guide" microwave distribution system. Unlike systems that merely turn the food, we spread the microwaves over the entire cooking surface with a rotating disc. The result is more evenly cooked roasts, casseroles, vegetables, you name it.



For even more features, take a look at our top-of-the-line. We call it The Brainwave.™ It's completely programmable, has a digital display (which can even tell you what time it is) and 91 separate power levels.



So stop by your Toshiba dealer and check out our latest models. They'll give you all the room you've been looking for.

TOSHIBA

Again, the first.

Toshiba America, Inc., 82 Totowa Road, Wayne, NJ 07470

A. Sulka & Company
GENTLEMEN'S HABERDASHERS SINCE 1895
NEW YORK LONDON PARIS

The new Sulka catalog! Elegant color photography showcases Sulka's fine collection in gentlemen's haberdashery. With imported fabrics our handmade ties, dress shirts, blazers, hosiery, pajamas, robes, "customized shirt" and monogramming services provide classic styles to your taste.

We invite you to send for our new catalog brochure.

Please send $2.00 check or money order and mail to: A. Sulka & Company, Inc., 711 Fifth Avenue, New York, N.Y. 10022

Name _____

Address _____

City _____

State _____ Zip _____

CHI 92

Honoring the Undauntable Individual

. . . who sticks his neck out for the common good. Loet Vanderveen's Solid Bronze Giraffe 6½" on Base. L.E. 500. $165.

Gift wrap and shipping gratis. New Jersey residents add 5% sales tax. VISA, MC and AMEX.

Undecided? Call toll free 800-631-2156 (in NJ 201-528-8400) or write for complimentary full color 52-page mail order "Quest" folio.

Brielle Galleries

707 Union Avenue
P.O. Box 475E
Brielle, New Jersey 08730

¡Speak Spanish like a diplomat!

What sort of people need to learn a foreign language as quickly and effectively as possible? *Foreign service personnel,* that's who. Members of America's diplomatic corps are assigned to U.S. embassies abroad, where they must be able to converse fluently in every situation.

Now you can learn to speak Spanish just as these diplomatic personnel do — with the Foreign Service Institute's Programmatic Spanish Course. You'll learn Latin American Spanish recorded by native speakers.

The U.S. Department of State has spent thousands of dollars developing this course. It's by far the most effective way to learn Spanish at your own convenience and at your own pace.

The course consists of a series of cassettes and accompanying textbook. Simply follow the spoken and written instructions, listening and repeating. By the end of the course, you'll be learning and speaking entirely in Spanish!

This course turns your cassette player into a "teaching machine." With its unique "programmatic" learning method, you set your own pace — testing yourself, correcting errors, reinforcing accurate responses.

The FSI's Programmatic Spanish Course comes in two volumes, each shipped in a handsome library binder. You may order one or both:

☐ **Volume I: Basic.** 12 cassettes (17 hr.), manual, and 464-p. text, $115.
☐ **Volume II: Intermediate.** 8 cassettes (11½ hr.), manual, and 614-p. text, $98.
(Conn. and N.Y. residents add sales tax)

TO ORDER BY PHONE, PLEASE CALL TOLL-FREE NUMBER: **1-800-243-1234.**

To order by mail, clip this ad and send with your name and address, and a check or money order — or charge to your credit card (AmEx, VISA, MasterCard, Diners) by enclosing card number, expiration date, and your signature.

The Foreign Service Institute's Spanish course is unconditionally guaranteed. Try it for three weeks. If you're not convinced it's the fastest, easiest, most painless way to learn Spanish, return it and we'll refund every penny you paid. Order today!

81 courses in 26 other languages also available. Write us for free catalog. Our 10th year.

Audio-Forum
Suite 905
On-the-Green,
Guilford, CT 06437
(203) 453-9794

AUDIO-FORUM®

Or visit our New York sales office: 145 E. 49th St., New York, N.Y. 10017 (212)753-1783

Van Allen's hands in Washington two days after the launch.

Working in his hotel room until three the next morning, hot on the trail of the explanation for the periodic blanking out of the instrument that Pickering first described, Van Allen finally convinced himself "that our instruments on both Explorers I and III were working properly but that we were encountering a mysterious physical effect of a real nature." Putting this continuous data together with a ground test of the instruments at very high levels of radiation, Van Allen and his graduate student assistants learned that when the instrument registered no counts whatsoever it was "saturating," or blanking out, at incredibly high levels of radiation. In effect, the instrument could not cope when the radiation reached levels 1,000 times greater than it was designed for.

Now Van Allen had the key, but hard work was still necessary to piece together the location of the radiation in space. Was all of space "radioactive," as his assistant Ernie Ray had facetiously exclaimed? Hardly. Sometimes the counting rate fell quite low. Was the Earth completely surrounded by this radiation? Not at high latitudes. Did the radiation extend outward to an indefinite distance? One

His name may be enshrined in space, but Van Allen still enjoys teaching astronomy.

could not say for sure, but it seemed to increase slowly, then jump dramatically upward, then decrease once again as the satellite moved in its elliptical orbit away from, then toward, the Earth.

Van Allen announced his preliminary findings—results that in their basics have withstood the test of time—on May 1, 1958. The Earth was encircled by radiation, charged particles trapped in its magnetic field (p. 164).

As he recounts, "A reporter asked, 'Do you mean like a belt?' " Indeed. The word stuck, with the eponymous designation that is usual for scientific discoveries. This was to be the Van Allen Radiation Belt.

The belt became, in the furor that followed the launches of Sputnik and Explorer, the first major scientific discovery of the "Space Age." As important as it was from a purely scientific standpoint, the great attention that it enjoyed derived mostly from the technical achievement of Van Allen and America in the face of the Soviet challenge.

The next months would see the establishment of the National Aeronautics and Space Administration. With this new organization, the United States would set about taking us to the moon, the planets, and farther into the infinite reaches of space.

Preferences Admitted

Introducing our Belleek China Shamrock Biscuit Barrel Lamp. Complete with hand-tailored white silk shade on hardwood base. Total height 16"
UL-approved. $158.

Gift wrap and shipping gratis. New Jersey residents add 5% sales tax. VISA, MC and AMEX.

Undecided? Call toll free 800-631-2156 (in NJ 201-528-8400) or write for complimentary full color 52-page mail order "Quest" folio.

Brielle Galleries

707 Union Avenue
P.O. Box 475 D
Brielle, New Jersey 08730

The Art Institute of Chicago Gift Catalogue

This 24 p. full-color gift guide features outstanding art publications, specially commissioned gift ideas, precise reproductions and approved adaptations that have been created under the direct supervision of the museum staff expressly for this catalogue.

— — — — — — — —

Please send the AIC 1982 Gift Catalogue to:

Name_____

Address_____

City_____

State_____ Zip_____

Enclosed is $1.00

Mail to:
The Art Institute of Chicago
Museum Store Dept. 102
Michigan Ave. at Adams St.
Chicago, Illinois 60603

Note: Members will receive their complimentary copy shortly.

Tall & Big Men

Send for this FREE catalog

Finally, you can get a good selection of great-looking clothes that fit!

Instead of getting sold short in stores that carry only a limited selection in your size, send for 96 pages of smart-looking clothes guaranteed to fit!

What a guarantee!

Your order from The KING-SIZE Co. is GUARANTEED both BEFORE and AFTER Wearing, Washing or Dry Cleaning. Unless you are fully satisfied, you may send it back for a full refund or exchange.

IT'S ALL HERE!

- ★ Brand-name shirts up to 22" neck and 38" sleeve
- ★ Slacks and jeans to 60" waist and 38" inseam
- ★ Jackets and outerwear to size 60
- ★ Shoes, boots, work shoes, and sneakers to size 16EEE

FREE COLOR CATALOG

Please send the latest KING-SIZE Co. full-color Catalog to me at the address below

My Telephone Number ____ _____
Area Code

Name _____

Address _____

City _____ State _____ Zip _____

THE KING-SIZE CO.

6902 King-Size Bldg. Brockton, MA 02402

Living well is the best revenge.

B and B

The drier liqueur. Imported from France.

© 1982 80 PROOF IMPORTED FROM FRANCE JULIUS WILE SONS & CO LAKE SUCCESS N.Y. 11042

By Roger F. Pasquier and Eugene S. Morton

For avian migrants a tropical vacation is not a bed of roses

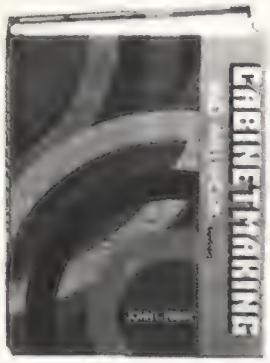
When 'our' birds head south for winter, they face hard times and steadily shrinking habitat

The prospect of spending winter in the tropics, on a Caribbean island, in the shady forest by a Mayan ruin, or in the cool Colombian highlands, is appealing. Of course, one wants to be assured of comfortable accommodations, good food, a friendly reception from the locals and an absence of other tourists. In other words, to have a long winter holiday free as a bird, just as all those North American orioles, tanagers, warblers, thrushes and flycatchers do after they leave home on their fall migration. In fact, in the Yucatán Peninsula of Mexico one migrant, the Yellow-throated Warbler (right), shows a preference for hotels—it seems to be found exclusively at resorts, where its diet includes bread crumbs and insects attracted by hotel lights.

The birds never lose their luggage when they travel south for the winter, but recent ornithological studies throughout the regions of the Caribbean, Mexico, and Central and South America where our birds winter have revealed that they face all the problems the human tourist hopes to avoid: suitable accommodations are not always available, the locals are indifferent if not actually hostile, and the place is often crowded with other North Americans one would hardly

Like many a tropical traveler, the Yellow-throated Warbler likes palm-studded resorts, where it eats insects attracted by lights.

This book grants a PhD. in carpentry.



A tremendous 992 page course in cabinetmaking. An encyclopedia of information, with 1,800 illustrations. Tells you exactly how to make any cabinet, built-in or piece of furniture you can imagine, in any style or period. Covers all materials, hardware, adhesives, hand and power tools. Amazingly complete and thorough. **Unconditional guarantee.**

Brookstone Company, Dept. 626A
Vose Farm Rd., Peterborough, N.H. 03458

☐ Send me____copies of *Cabinetmaking and Millwork* @ $28.95 ea., postpaid.
☐ **Send me Brookstone's FREE catalog "Hard-To-Find Tools and Other Fine Things."**
☐ Check enclosed ☐ Visa
☐ American Express ☐ MasterCard
24-hour credit card phone: (603) 924-9511
Card # _____ Exp____
Name_____
Address _____
City_____
State _____ Zip_____
I-3506-32

Brookstone

FAMILY CREST RINGS

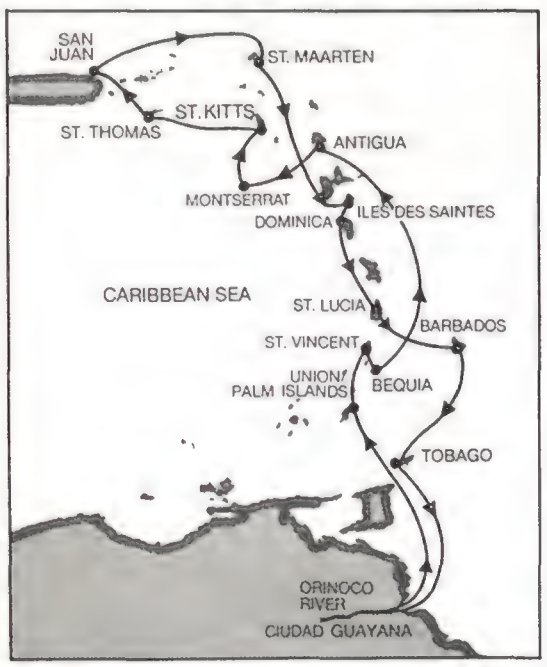
14K Gold. $590.00
SterlingSilver. $195.00
WE WORK IN THREE BASIC WAYS—If you have a crest, send a copy of it, otherwise you may check it against our list, or you may design your own (see below). **SEND FOR OUR FREE COLOR CATALOGUE.** If, in addition to free catalogue, you want our booklet with over 20,000 names for which we have crests available plus instructions on how to design your own crest, **send us $1.00.**

HERALDICA IMPORTS, INC. D•SM
21 WEST 46th ST. • NEW YORK, N.Y. 10036

The highly pampered pride of our feline family. Send $1 for 36 page, full color catalogue of more than 130 handmade, handpainted pieces that make up a particular part of this renowned collection
ROYAL COPENHAGEN PORCELAIN
225 Fifth Avenue, New York, NY 10010
(1) 800-223-1275 N.Y. State 212-889-2722

PARADISE FOUND

Follow the route of enchantment with us, to the jungle resort of Canaima, reached only by plane from Ciudad Guayana—our port 180 miles up the Orinoco River in the heart of Venezuela. Here, on a bluff above a dark lagoon churned by seven waterfalls, you'll look out on dense jungle and truly feel like a stranger in paradise. We'll visit the very "in" out-islands of the Caribbean, too—Bequia, Union and Palm, Montserrat and others. The discoveries are endless on the Stella Oceanis' Leeward to the Orinoco cruises from San Juan. And shipboard life on the yachtlike Stella Oceanis is on an intimate scale that creates an atmosphere of relaxed conviviality. And the renowned cuisine makes dining one delicious decision after another. See your travel agent or call us at 800-223-5760 or (212)397-6400, or send for our '82/'83 brochure. Luxury ship of Greek registry.



Sun Line, One Rockefeller Plaza, N.Y., N.Y. 10020.
Name_____
Address_____
City_____ State_____ Zip_____
My travel agent is_____
SI101082

STELLA OCEANIS
Anything else is a compromise.

consider associating with back home.

In spite of all these difficulties, many birds spend up to seven months at a tropical wintering site, several weeks traveling north and south each year, and perhaps only eight or ten weeks raising their young in northern climes. Just as the Internal Revenue Service considers the place one spends more than six months one's actual home, so might we consider the tropics the true home of many of our familiar summer visitors.

Why, then, do so many birds make long and hazardous journeys to the tropics each year? And why, once they seem to be settled there, do they turn around and come north to nest? Most of the long-distance migrants feed on insects, which for much of the year are not available in adequate quantities in North America; in order to survive, the insect specialists must move to warmer regions where insects or substitute foods like fruit are more plentiful. While such food may be found in the tropics, there is not always enough to feed a hungry, growing family, so many birds move north each year to raise their young in the temperate zone where, for a few months, insects are abundant.

Today ornithologists are focusing on the behavior and ecology of these birds when they reach the tropics. The results are often surprisingly different from the long-held ideas about what the birds do in winter.

Many North American birds change their behavior entirely each year in order to survive in the tropics. Some become aggressively territorial, others that were solitary join flocks, while certain sedentary species become long-distance wanderers. A few birds even make abrupt switches from aggressive individualism to mild-mannered flock participation.

Roger F. Pasquier is the author of the book Watching Birds: An Introduction to Ornithology. *Eugene S. Morton is a research zoologist at the National Zoo.*

What your home could have in common with the Met, the Tate, and the Louvre.

Jack Eaker's *Northeast Harbour Still Life*, original lithograph. Signed limited edition of 195.

Antonio Peticov's *Primavera*, original serigraph. Signed limited edition of 195.

Bernard Charoy's *La Femme aux Perles*, original lithograph. Signed limited edition of 250.

Wilbur Streech's *The Red Maple*, original serigraph. Signed limited edition of 250.

Nathalie Chabrier's *La Neige*, original lithograph. Signed limited edition of 250.

Allain Renoux's *Thonon-les-Bains*, original lithograph. Signed limited edition of 175.

Charles Bofinger's *Start of the Race*, original serigraph. Signed limited edition of 275.

Marlene Lenker's *Autumn Prelude*, original lithograph. Signed limited edition of 250.

Johnny Friedlaender's *Scherzo*, original etching with aquatint. Signed limited edition of 95.

In your own home, you can exhibit original work by artists who are represented in the world's great museums and galleries.

Artists like Calder. Chagall. Dali. Miró. Picasso. Vasarely.

At the Original Print Collectors Group, we offer moderately priced limited edition prints by these and other well-known artists.

Our offerings include signed original etchings, engravings, lithographs, woodcuts, and silkscreen prints.

Each print we offer is signed and numbered by the artist. Custom-framed. Accompanied by a certificate of authenticity and a full money-back guarantee.

And each print has been chosen not only for its beauty but for its investment value.

(Works by the artists we offer tend to appreciate, sometimes as much as 30% in a single year. Perhaps that's why *The Wall Street Journal, Business Week, Money,* AP, *Barron's* and UPI have quoted us as an authority on investing art.)

For more information, send in the coupon. There's no obligation.

You'll find out about the special pleasure of owning original art, instead of just visiting it.

Visit our new gallery located at 215 Lexington Avenue, Mon–Fri, 9–5 PM. Telephone: 212-685-9400 Ext: 35

Original print collectors group, Ltd.

215 LEXINGTON AVE., DEPT. S-86, NEW YORK 10016

PLEASE SEND ME YOUR FREE COLOR CATALOGUE WITHOUT OBLIGATION.

NAME _____

(PLEASE PRINT)

ADDRESS _____

CITY _____ ST _____ ZIP _____

© 1982 OPCG, LTD

The Washington Point of View...

HOTEL WASHINGTON
15th & Pennsylvania Avenue
Washington, D.C. 20004

Visitors to the nation's capital should be able to enjoy Washington's beautiful scenery from their hotel.

Singles: $68-$81
Doubles or Twins: $80-$93

The Hotel Washington overlooks the White House, national parks and monuments. Almost all of our 375 spacious and tastefully appointed rooms offer a spectacular view. May through September, the rooftop Sky Terrace is Washington's favorite open-air vantage point for luncheon and evening cocktails. And, The Two Continents In The Sky Restaurant offers superb dining ala Washington Under Glass. Group rates available for ten rooms or more. Phone 202-638-5900 or toll-free:

1-800-424-9540

Northern Waterthrush defends winter territory just as it defends nest site.

Just as we are learning how specialized many North American migrants become in winter, we are seeing the habitat on which they depend disappear at an accelerating rate. The researcher can no longer be certain that his tropical-forest study plot will not have been converted to pasture or cornfield by the time he and his avian subjects return next year. The more we can learn about the winter requirements of "our" birds, the more we can do to assure their preservation.

The birds arriving in southern latitudes find an environment quite different from the vernal "bloom" of abundant insect life they exploit so facilely in North American springs and summers. In many areas where these birds winter, insect populations are at their lowest levels during the season when the greatest number of insectivorous birds is present. The birds do not land in a paradise of easy pickings, but in an environment that may be fiercely competitive.

Many birds respond by becoming generalists, ranging over a greater variety of habitats than they select while in North America, but nearly all require forests or woodlands. Studies from Mexico to Amazonia are showing that a significant number of birds maintain winter territories that they defend with as much vigor as their breeding territories, and to which they return in successive years. Thus, in Venezuela, marked Northern Waterthrushes (above) spent six

Walking Lady by OLDMAINE trotters®

Send for our FREE brochure.

Sizes 5-11
Widths 4A to D
Burgundy, Camel, Lt. Brown, Navy, Bone, White

This is the softest, lightest shoe you can run around in. Made like a moccasin — the real, hand-crafted thing — it's set on a cushy genuine crepe sole.

$42.00

Add $2.00 for postage and handling.
Vt. add 4% Sales Tax
Check, Master Card or VISA (Incl. Expiration Date)

Read's at shelburne harbor
BOX 6, S-1, SHELBURNE, VT 05482 (802) 985-8535

Original Etchings
An extensive selection of limited edition prints, signed and numbered by the artist - custom framed
FREE COLOR BROCHURE
artimage
Publishers of fine Art
P.O. Box 3178 • Long Beach, CA. 90803
U.S.A. • (213) 434-9728

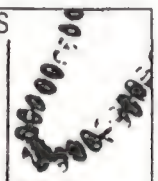
The Lighter Side
Delightful Gifts & Surprises

Free Christmas Catalog of Fun!

400 unusual gifts of wit & whimsy, merriment & mirth. For 67 years we have searched the world for reasonably priced items for all ages from the "Lighter Side of Life." No other catalog like it. Add glee & gaiety to your holiday shopping. Send for your free catalog today. Satisfaction guaranteed.

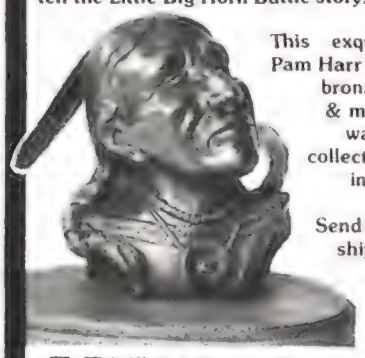
The Lighter Side
Dept. 5680, Mt. Clemens, Mich. 48043

AMBER
GRADUATED NUGGET NECKLACES
Golden splendor mined high in the mountains of the Dominican Republic. Individually knotted on silk thread w/yellow g.f. clasp.
☐$48.00 for 22" ☐$32.00 for 17"
☐M.O./Ck. ☐MasterCard®/Visa
Acct. # Exp. Date & Sig.
AMBER Caribbe
P.O. Box 1375A Kingston, Pa. 18704



Specify: honey yellow or varigated brown

CROW SCOUT
From The American Heritage Art Series
Haunted eyes of this 7th Cavalry Crow Scout indelibly tell the Little Big Horn Battle story.



This exquisitely detailed Pam Harr original is cast in bronze, hand finished & mounted on a solid walnut base. A true collectors item. Offered in a strictly limited edition of 500. Send $295. plus $5.95 shipping & handling today.

4½ x 5½. Check, Money Order, Visa, Mastercard. Account Number & expiration date please.

ARTMARK, Ltd
Dept. S2 • 609 West Mendenhall
Box 351 • Bozeman, MT 59715

Announcing the return of a legendary magazine.

Please accept the premiere issue with our compliments

From 1914 to 1936, a most memorable magazine called *Vanity Fair* epitomized the elegance and style, artistry and wit of a now-vanished age.

In March of 1983, Condé Nast Publications will present the premiere issue of the new *Vanity Fair.* A magazine that captures the sparkle and excitement of the '80s as no other magazine today.

Literary and liberated. Adventurous, skeptical, irreverent. As complex and contradictory as the time in which we live. A magazine of literature and the arts. Politics and popular culture. Private lives and public events. Films and theater. Music and dance. Art and photography. TV and travel. Books and economics. Poetry. Food. Sports. Just about everything worth doing, seeing, talking about, knowing about.

Our contributors will include some of today's most original novelists, journalists, poets, artists, photographers, critics. We will offer them a unique freedom and breadth of expression. They, in turn, will offer us their wit, new perceptions, provocative points of view. From its essays, reviews and profiles to its photography, paintings and cartoons, the new *Vanity Fair* will be a magazine of excellence and innovation. A magazine whose time has come... again.

Now, for a limited time, you can reserve a complimentary premiere issue.

© The Condé Nast Publications Inc. 1982

VANITY FAIR

- Rings won't twist with new Finger-Fit!
- Rings slip on and off easily even over swollen knuckles.

Jeweler can attach to any woman's ring, old or new. Opens 3 sizes, snaps closed for snug fit. 14K yellow or white gold or platinum.

U.S. PAT. NO. 2771753

Thousands of satisfied customers coast to coast!
Mail coupon for name of Finger-Fit jeweler near you

FINGER FIT ... *for a Comfortable Fit!*

DEPT. S-10, BOX 366, ROYAL OAK, MICH. 48068

NAME

ADDRESS

CITY, STATE, ZIP

NEW! **Taste treats from the desert!**

4-pak selection of honeys & jellies offers unique taste experience! 2 jars of honey - 12 oz. each from blossoms of Saguaro cactus and Palo Verde tree. 2 jars jellies - 10 oz. each from lucious Prickly Pear fruit & Jalapeno Pepper. No artificial color, flavor or preservatives. **Taste satisfaction guaranteed** or money back. **$16.00** gift packed & delivered. **Free catalog included.**

Milford's **2553 Kalmia, Boulder, CO 80302**

CREW * SALE PRICED 24.99

100% SHETLAND WOOL

Classic crewnecks, crafted of 100% Shetland wool, full-fashioned with saddle shoulders in navy, green, sand, grey, wine or lt. blue. S-XL. Monogram (as shown): navy, kelly, white. $4

Qty.____ Color____ Size____
Name ____
Address ____
City____ St.____ Zip____
3-Initials____ Mono. Color____
Maryland Sales Tax____
Postage and Handling 2.50
Total____
Visa_MasterCard_Amer. Exp._Check____
Acct. No. ____
Exp. Date____ Phone No.____

Send me your new Fall Catalog ____

Call Toll Free 1-800-368-2571 In Md.(301)574-0660

Hamburgers

Mail To: Hamburgers Rossville Blvd.
P.O. Box 18504 Baltimore, MD 21237-0704

months defending a plot. At the same study site, American Redstarts (below) maintained territories for seven months. The important distinction between breeding and winter territories is that wintering birds are not paired; every wintering individual, male and female, has a separate territory—approximately the size required by a breeding pair.

Today, tropical forest is being cleared at the rate of 50,000 to 100,000 hectares annually (a hectare is about 2.5 acres), and this could affect the long-term survival of many species of migrants. The trend is shown in microcosm in an eight-year study of wintering birds at a six-hectare site in Veracruz, Mexico, that was forested in 1973. In late 1980 only about 25 percent of it remained relatively undisturbed forest. Among the bird species that had disappeared altogether in the interval were the Black-and-white Warbler and the Worm-eating Warbler, as well as the Swainson's Thrush (p. 184).

Other species, once territorial, became wanderers that showed little tendency to defend any part of the habitat. The Hooded Warbler (p. 184) showed the effect of habitat alteration in a different way: where 12 birds had held territories in 1975, only five did in 1980, and the average territory size went up from three-tenths to one hectare. Evidently a Hooded Warbler required three times as much poor habitat as good habitat.

Redstart's broad, flycatcherlike bill may be traced to winter feeding habits.

Cotton Flannel Sheets are only the beginning!

The new full color Lucy Stewart Catalog is filled with natural products for gracious and comfortable living. For your copy send $1.00 today to:

LUCY STEWART'S PRIVATE STOCK®

Dept. 7A
Rte. 16, Main St.
No. Conway, N.H.
03860

WEATHERVANES
THE GOOD OLD FASHIONED KIND
ALL COPPER & BRASS
FULL-BODIED FIGURES
Send 50¢ for Brochure
EAGLE
• FISH
ROOSTER
• WHALE
and more
18 Varieties
GOOD DIRECTIONS COMPANY
Dept. W12 24 ARDMORE RD. STAMFORD, CT 06902

***Thomas Potts* "FIREBACK"**

Authentic Replica of 1758 Original

Highly ornamented stoveplates and firebacks with unique designs were used widely in fine homes of Colonial times. These decorative cast iron plates protect the rear fireplace wall from intense heat, radiate extra warmth.

OUR ELEVEN FIREBACK DESIGNS are fine hand made originals and historic replicas in grey iron. The "Thomas Potts" plate (shown) is 24" x 24" x ½" thick. Weighs 85 lbs. $140.00 delivered. (W. of Miss. add $40. Pa. res. add 6% tax.)

BROCHURE ON FIREBACK HISTORY and our fine replicas. $1.00 (refund on order).

THE COUNTRY IRON FOUNDRY
(Showroom: 1792 Lancaster Pike)
Box 600-T10, Paoli, PA. 19301
Phone: (215) 296-7122

THE COUNTRY IRON FOUNDRY

Sacred Eye Ring

This Ancient Egyptian Amulet—"Udjat" worn for protection.
• Sterling Silver Ring—$37.50
• 14 Karat Gold Ring—$298.00
• Ring sizes 5-11 • Boxed with certificate • Amex, Visa
• Brochure—Jewelry replicas from Ancient Worlds—25¢

aladdin house, ltd.
Dept. S10 • 654 Ninth Ave. • N.Y. 10036

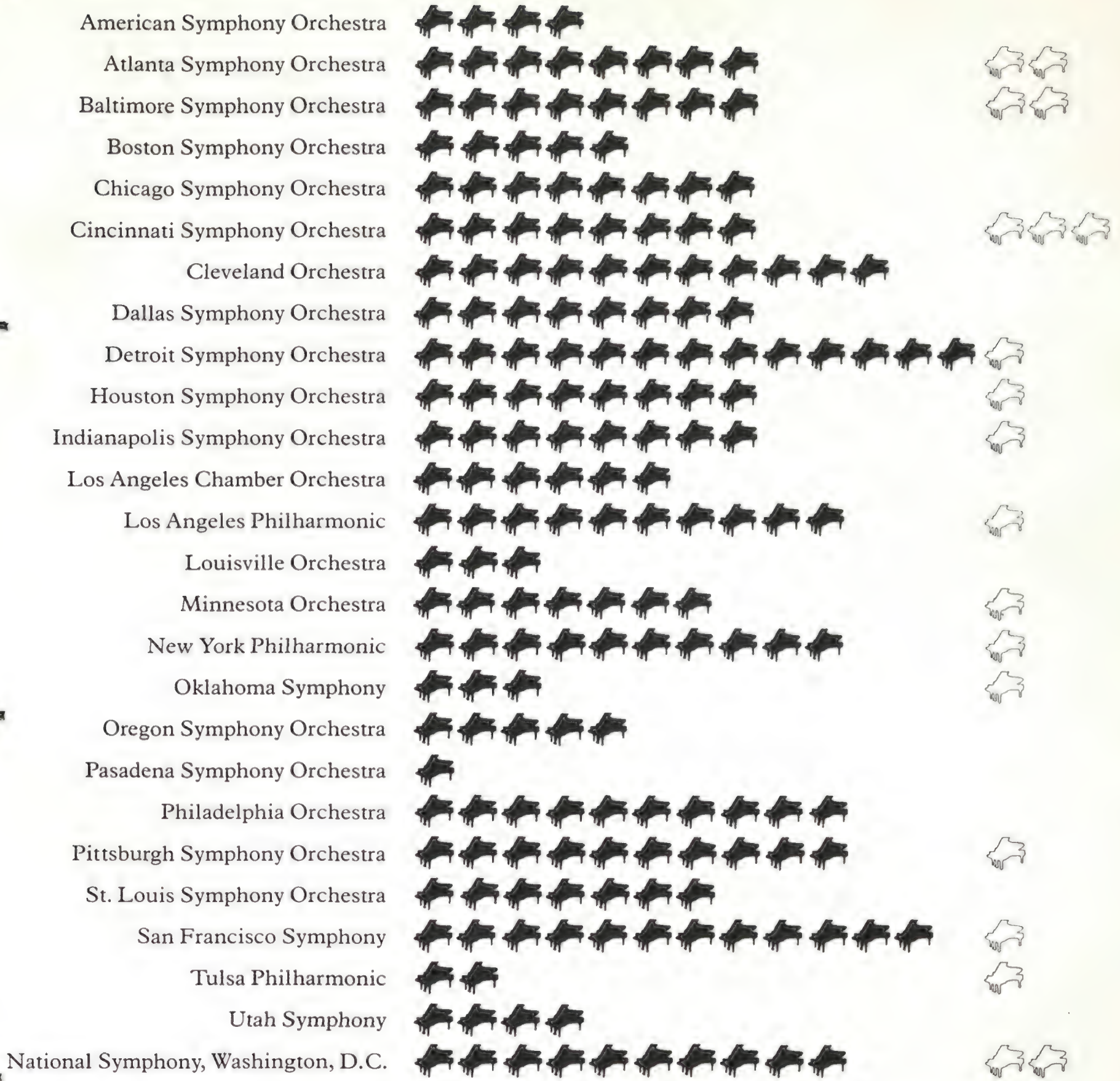
CALVERT SCHOOL

Kindergarten through 8th grade.

Educate your child at home with approved home study courses, or use as enrichment. Home is the classroom, you are the teacher with the help of step-by-step instructions. Start anytime, transfer to other schools. Used by over 300,000 students. Non-profit. Write for catalog. Admits students of any race, color, national or ethnic origin.

CALVERT SCHOOL
Established 1904 301-243-6030

Box S10-2, Tuscany Rd., Baltimore, Md. 21210



Our 1982-83 bottom line: **Steinway 189.** **All others 19.**

This concert season, Steinway Pianos are once again the overwhelming choice of soloists scheduled to perform with major orchestras in the U.S.

For literature about the Steinway, write to John H. Steinway, Dept. 21, 109 West 57th Street, New York, N.Y. 10019.

Steinway & Sons

Wildlife & Cultural Expeditions

Combine adventure, discovery, learning and vacation on nature, cultural and photography expeditions worldwide!

Join small groups interested in Japan . . . Alaska . . . Bhutan . . . Baja California . . . Galapagos . . . Polynesia . . . China . . . Nepal . . . Tanzania . . . Scotland . . . and more than 25 other unique areas worldwide led by experts in anthropology, natural history or photography.

For complimentary brochures and itineraries write

Nature Expeditions International
599 College Ave. • Dept. SM • Palo Alto, CA 94306 • (415) 494-6572

GREEN MOUNTAIN SUGAR HOUSE Ludlow, Vt. 05149

VERMONT MAPLE SYRUP

Why not treat yourself to the best, or give a gift of top quality? Pure Grade A maple syrup direct from Vermont producer. Quarts postpaid east of Miss. River $11.75, west $12.25. ½ gallon east of Miss. River, $18.50, west $19.50. Write for FREE CATALOG of all four grades & sizes & other Vermont country products.

GREEN MOUNTAIN SUGAR HOUSE
Dept. S82, Ludlow, VT 05149

Like all territorial species, Mourning Warbler keeps same plumage year round.

BOOKS CALENDARS GIFTS
Write for free Holiday Catalogue

THE ASIA SOCIETY

Asia Society Bookstore
Box K, 725 Park Avenue
New York, N.Y. 10021
(212) 288-6400

日本刀
JAPANESE SWORDS
For Free Evaluation Sheet
$200 $10,000 CASH PAID
TOLL FREE 800-435-5119
David E.J. Pepin—Member NBTHK, Tokyo, Japan
Dept. S1, P.O. Box 354, Grant Park, Il. 60940

FREE REPORT

What Rare Coins To Buy Now What Coins To Avoid

Private Market Letter plus serious investment information free to Journal readers.
Write: Free Report, Dept. CR-19B
Littleton Rare Coins
Littleton, NH 03561

Build Your Own Hand Crafted
Grandfather Clock
Semi-assembled kits of cherry, walnut, oak or mahogany for you to create a treasured heirloom. Step-by-step plans. Write for free literature.
Kuempel Chime Clock Works & Studio
Dept. 611, 21195 M'tka Blvd. Excelsior, MN 55331
Established In 1916

Which of these languages would you like to speak?

Mark the one you want to speak in 2 or 3 months' time

American English	☐	German	☐	Norwegian	☐
Arabic	☐	Greek (Modern)	☐	Polish	☐
Chinese	☐	Hebrew (Modern)	☐	Portuguese	☐
Danish	☐	Irish	☐	Russian	☐
Dutch	☐	Italian	☐	Spanish	☐
French	☐	Japanese	☐	Swedish	☐

A Linguaphone Course makes you feel at home in almost any country. You'll never miss the meaning of conversations or be at a loss for words.

- World famous over 4 million Linguaphone students in 88 countries speak a second language FLUENTLY.
- Proven learning success. You LISTEN to real conversations on cassettes...UNDERSTAND what you hear by following illustrated textbooks... HOLD CONVERSATIONS with the speakers.
- Linguaphone Institute established nearly 60 years, a Division of Westinghouse Learning
- You learn faster and at less cost
- **Comprehensive - Basic and intermediate instruction ALL IN ONE COURSE.**
- You develop an authentic accent.
- **Money-Back Guarantee.** Linguaphone Courses are unconditionally guaranteed. Try it for four weeks. If you're not completely satisfied, return it for a full refund. There's no risk and no obligation, so order today!

Linguaphone The Language Masters

NO RISK GUARANTEE — 28 DAY FREE TRIAL

World Language Courses, Inc. Dept. 110 313 Nolana Ave. McAllen, Texas 78501

Please send me the complete course (comprehensive -- basic and intermediate). 30 lessons on cassettes and three books. $105.00 postpaid.

☐ Check enclosed. Charge my ☐ Visa ☐ Mastercard
Acct. # _____ Expires _____
Name (please print) _____
Street _____
City _____ State _____ Zip _____
Signature _____

Even without Man's habitat alterations there are inevitably more individuals than suitable territories, just as in the breeding season. This produces a population of "floaters" that subsist in marginal areas or at the periphery of the territories of other birds. Experiments with Ovenbirds (p. 180) in Veracruz have demonstrated that when a territorial individual is removed, its place is taken within a day by a former "floater." Previously meek and retreating, it becomes sedentary and aggressive when in possession of desirable living space.

Certain patterns in the wintering habits of North American birds are becoming evident. All of the territorial species occupy niches that change the least from season to season —the ground or the lower levels of moist forest or, for the Mourning Warbler (above), wet grassy swales at the forest edges. All territorial species keep the same plumage coloration for both breeding and nonbreeding seasons. And all use distinctive calls to signal their ownership of territory.

The Hooded Warbler plays an interesting variation on the plumage theme. Females have little chance to compete successfully for territory with the larger males in their first winter. Therefore young females are pure yellow the first year and shun forests that contain the males in favor of dry, shrubby places. But in later

In this one-of-a-kind laboratory, the scientists don't wear lab coats.

It doesn't look much like a laboratory.

A world of ice and snow, where the average temperature runs four degrees below zero. In the summer.

But, in fact, the continent of Antarctica is a perfect natural laboratory—one of the last left on Earth.

There are many experiments (in fields like geomagnetism, glaciology, and oceanography) that can't be done anywhere else.

Right now, for example, scientists supported by the National Science Foundation are analyzing sections of the ice sheet.

They're searching out what the Earth's atmosphere and climate were like thousands —even millions—of years ago.

Of course, that's just one of the many experiments that bring several hundred U.S. scientists to the polar continent every year.

And, to take care of them, our subsidiary Federal Electric Corporation is there, too.

We build dormitories, run power plants, cook meals.

Everything that's needed for day-to-day living.

You see, we want to make sure that the scientists can spend their time thinking about science.

And that they're comfortable when they finally leave their lab and come back indoors.

The best ideas are the ideas that help people. ITT

(c) 1982 International Telephone and Telegraph Corporation, 320 Park Avenue, New York, N.Y. 10022.

Haband's

Flannel Lined Winter Slacks

only 21.95

NOT A NECESSITY, BUT WORTHWHILE LUXURY!

The outer fabric is tight woven wind-breaking polyester and cotton poplin. A great all-weather quality cloth. And on the inside, they're **completely lined, from waist to cuffs, with the softest, warmest, most comfortable polyester/cotton plaid flannel fabric that ever kept you warm and dry!**

Permanent Press to hold their knife-like crease. Machine wash and dry, of course! *(We wouldn't ask you to worry about something like that!)*

In Navy or Tan, but you'll want both! Designed for bitter outdoor weather, there's no law that says you can't wear them indoors too, especially during a fuel crisis!

Order now! At Haband's inflation-fighting low price, combined with the wintry forecast and fuel uncertainty, we know these slacks won't be in stock for very long!

FLANNEL LINED WINTER SLACKS 21.95 2 for $43

HABAND COMPANY, Executive Division
265 N. 9th St., Paterson, N.J. 07530

Please send ... pairs. I enclose $..... plus $1.35 toward shipping.

Guarantee: *If on receipt I don't want to wear them, I may return the slacks within 30 days for full refund of my remittance.*

Even Waist Sizes 30 thru 54*
Inseams 26 to 34
*Waists 46-54 please add $2 per pair.

COLOR	Waist	Inseam
NAVY A		
TAN B		

Or Charge to:
VISA
MasterCharge
Acct#_____
Exp.Date__/__/__
76N-039
Name_____
Street_____ Apt.#_____
City_____
State_____ Zip_____

HABAND COMPANY

years they become more malelike, with some finally acquiring a black hood that signifies age and dominance. These older females move into the habitat—presumably more desirable—occupied by the males.

Other birds adopt the opposite strategy in winter. They have no winter "home," but roam about in search of the most abundant and easily exploited food. A striking example of this is the Eastern Kingbird (below), a flycatcher so named because in the breeding season it not only refuses to tolerate other kingbirds nearby, but also pugnaciously drives away much larger crows and hawks. In autumn it migrates rapidly through the tropics to the southern Amazonian basin of Peru and Bolivia where, abandoning aggressiveness, it congregates in large flocks on fruit trees, mainly of the genus *Didymopanax*. As the kingbirds exhaust the local fruit supply, they move north, where

Feisty insectivores up north, kingbirds are sociable fruit eaters in tropics.

Some of this world's most WONDERFUL Christmas Cards,

delightfully fashioned in the Spirit of Christmas Past, with greetings from Shakespeare, Dickens, O. Henry, and others, are now available (with many other good things) at astonishingly reasonable prices in the new Cahill Catalog.

Cahill & Co., 143 Palisade St.
Dobbs Ferry, N.Y. 10522

VERMONT FOOD GIFTS

80 unique, beautifully-packaged gifts in our FREE 24-pg. Christmas catalogue. 100% Pure Maple Syrup and Cream, Smoked Meats, Candies, Aged Cheeses, Preserves & more. (802) 748-5141.

Maple Grove, Inc., Dept. S
St. Johnsbury, VT 05819

CUDDLE UP
with our FREE CATALOG of European-style DOWN QUILTS

Cotton or cotton blend fabrics, filled with your choice of duck or goose down. Decorator sheetcase covers and puffy pillows, too. Our quality is guaranteed. And our prices are reasonable. Send us your name and address and we'll rush our catalog.

WARM THINGS

180 Paul Dr—Dept SO / San Rafael, CA 94903
415/472-2154—48 HR SERVICE—MC & VISA

Explore Bahamas Out Islands

Join 70 passengers on 12 day cruises aboard "New Shoreham II". Chef-prepared meals. Air-conditioned cabins. Nov. '82 — May '83. Summer canal and coastal cruises out of Warren, R.I. May — Sept. Toll free 800-556-7450.

AMERICAN CANADIAN LINE, INC. Box 368, Dept. S. Warren, R.I. 02885

celtic cloak

GENUINE IRISH WOOL — $165

Two plaids available: Grey with blue and loganberry • Blue-green with gold and bronze

Knitted cowl easily converted into hood.

*Visa, MC#*_____
*Exp. date*_____

conla
CELTIC DESIGN

CONLA • P.O. Box 689 Amherst, MA. 01004

If not satisfied, return within 14 days for full refund
Allow 4-6 weeks for delivery

The Possibilities are Endless.

Six-mode exposure control. System versatility. Newer electronics for wider applications.

The Canon A-1 is one of the world's most advanced automatic SLR cameras. Combining the finest in optical and mechanical engineering with the most sophisticated electronics, it's technology applied to give you the ultimate in creative control. At the touch of a button.

Depending on your subject, you can choose from six independent exposure modes to achieve the results you want:

1 Shutter-Priority: You select the shutter speed, to freeze the action and prevent camera shake or create an intentional blur. The A-1 automatically selects the appropriate lens opening.

2 Aperture-Priority: Control the area in focus by selecting the lens opening for the effect you want. The A-1 matches with the right speed.

3 Programmed: When you need to shoot fast, just focus. The A-1 will select *both speed and aperture* for great results.

4 Stopped-Down: For extreme close-up or specialized photography, a bellows, a microscope or almost anything can be attached to the A-1. It's still automatic.

5 Flash: Totally automatic flash photography, of course, with a wide variety of Canon Speedlites to choose from.

6 Manual: Yes. For those times when you absolutely want to do it all yourself. To experiment. To explore the possibilities.

There are over fifty fine Canon FD lenses ranging from Fish Eye to Super Telephoto, plus accessories to meet every need. If you can't photograph your subject with a Canon A-1, it probably can't be photographed.

From the sophistication of its LED viewfinder display, to a ruggedness that allows up to five-frame-per-second motor drive, the Canon A-1 represents an incredible technology. At a price that makes owning one a definite possibility.

Canon® A-1

The Official 35mm Camera of the 1984 Olympic Games

Canon USA, Inc., One Canon Plaza, Lake Success, New York 11042 • 140 Industrial Drive, Elmhurst, Illinois 60126 • 6380 Peachtree Industrial Blvd., Norcross, Georgia 30071 • 123 Paularino Avenue East, Costa Mesa, California 92626 • Bldg. B-2, 1050 Ala Moana Blvd., Honolulu, Hawaii 96814 • Canon Canada, Inc., Ontario

© 1982 Canon U.S.A., Inc.

Kăch-ĕl-ōfen.

Kachelofen. Fashioned by skilled artisans of masonry and ceramic tile, these stately, magnificent central heaters have warmed Alpine homes for 700 years. Housed in museums and castles throughout Europe, they are viewed as national treasures.

The WESO Ceramic Tile Stove from Germany is a direct descendant of Europe's mighty kachelofens. The WESO's cast-iron firechamber is surrounded by thick, hand-glazed ceramic tile which captures and releases the fire's warmth far better than metal could.

The WESO burns wood or coal and offers every efficiency feature you could ask for. Its beauty is breathtaking. Choose from 7 decorator tile colors, and enjoy the WESO's visible fire and all-over warmth. **We have stoves for immediate delivery.**

At last. An efficient woodstove beautiful enough for your home.

Rush me your literature portfolio by first class mail, featuring the WESO in all seven tile colors, complete performance data, details on WESO's new coal stove, and current shipping schedule. Enclosed is $1 to help cover mailing costs.

Name _____

Address _____

_____ Zip _____

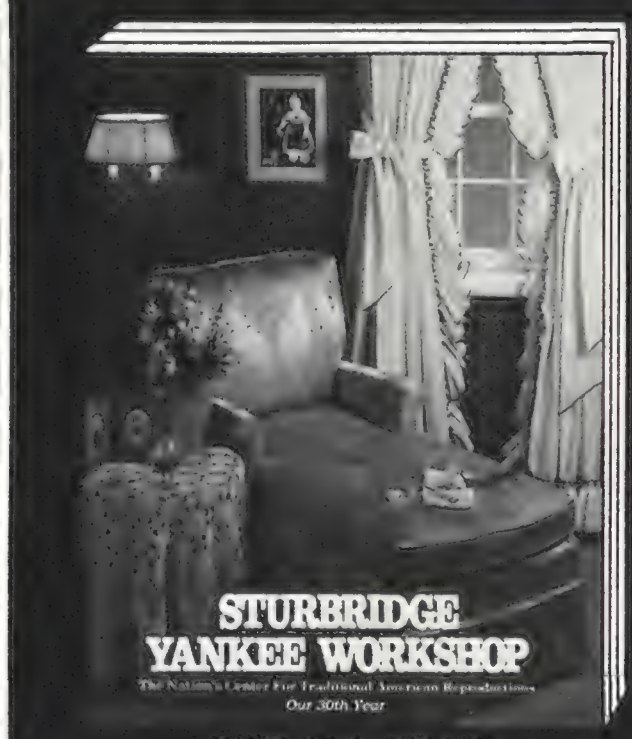
Ceramic Radiant Heat **132A Pleasant Drive**
603/524-9663 **Lochmere, N.H. 03252**

Passive Ovenbird "floaters" become aggressive when they acquire territory.

other *Didymopanax* are just coming into fruit. By mid-March they reach Panama. It seems highly likely that the fruiting method and schedule of *Didymopanax* and the winter movements of Eastern Kingbirds have evolved together in a mutual dependency to assure that the tree's seeds will be spread and the kingbirds will be fed. Forestry practices that removed *Didymopanax* from part of the kingbird's range might leave them without any source of food, since at this season the birds abandon insect prey.

Another dramatic change in diet can be seen in some migrant hawks. In the autumn, Broad-winged Hawks (p. 188) and Swainson's Hawks soar over Panama in large numbers, rising on thermal bubbles of air to great heights before planing off toward South America. But many of the Broadwings—which in North America eat birds, mammals and reptiles—remain in Panama, where they become crepuscular. Like small tropical owls, they feed upon the large katydids that become active at dusk.

The most varied survival strategies may be found among the species that molt into less brightly colored or distinctive plumages. Notable among these are what bird watchers call the "confusing fall warblers," about which Roger Tory Peterson, the dean



FREE
CATALOG of Traditional American Reproductions

Over 1,000 distinctive items
From Colonial to Victorian, from Country to Classic

OUR 30th YEAR

Big, new collection of beautiful things for every room in your home, for every gift need. A sample of our wares: period furniture, wicker, homespun curtains, rag rugs, bed & bath linens, framed primitives, quilts, stoneware, brass, pine, oak. Most not available in your local stores. Complete money-back guarantee.

Name _____ Address _____

City, State _____ Zip _____

STURBRIDGE YANKEE WORKSHOP
Dept. N7K1, Blueberry Road, Westbrook, Maine 04092

IN 70 SECONDS, TURN YOUR FAVORITE SLIDES INTO FABULOUS PRINTS.

Now you can make professional quality color prints from your slides, instantly. Without messy chemicals, bulky equipment, or a week of waiting. Now, when friends or relatives ask for a copy of a much admired slide, you can make it right before their eyes.

You probably agree 35mm color slide film is an ideal format. It's cheaper to buy and process, it makes great wall-sized slide shows, and the slides store easily. And there are no negatives to lose. The drawback has always been the time consumed in getting prints made—it takes a week, it's inconvenient, and costs a dollar per print or more.

Make large, vivid color prints from slides like this in just 70 seconds.

Vivitar's® amazing invention.

But now Vivitar has developed an inexpensive, easy-to-use instant slide printer™ that you can use at home. There's no skill required. Just insert your slide, push a button, and seventy seconds later you have a magnificent color print. It's that simple.

What's more amazing is the quality of reproduction. Unlike other instant printers which sell for $300 or more, the far-less-expensive Vivitar makes prints that are as good or better than the local photo finisher. The quality is superb. The colors are rich and pure. And because it uses the new style Polaroid® 669 film, the prints are just like ordinary printing paper (and don't need any coating).

At the heart of this sophisticated printer is a precision enlarging lens from the same engineers who created the highly respected Vivitar Zoom camera lenses. Exposure is automatically set, or can be manually adjusted to improve a slide that's too dark or too light. The printer is 10" high, 6" wide, 4" deep, and is beautifully designed in black high-impact plastic with blue trim. It weighs only 3 pounds. One year limited warranty.

Color prints measure 3¼ × 4¼", with an image size of 2⅞ × 3¾". The color Polaroid film is priced from $7.50 to $8.50 for a pack of 8 prints, depending upon store discounting. Now you can shoot color slide film for its economical costs and advantages. Then make selected color prints for as low as 93¢ each, saving hundreds of dollars. As a system, it's far less expensive than using color print film—and has all the flexibility that slides give. Plus, your Vivitar printer and film can be tax-deductible if you use slides or prints in your professional occupation.

Experiment on us.

By ordering now, you'll receive a *free roll* of Polaroid film, good for eight beautiful prints. You'll even receive a *free set* of four Duracell®"C" batteries. So you can make eight prints of your own, on us. Be as critical as you wish of the result. You must be satisfied. If not, simply return the Vivitar slide printer within 30 days, for a prompt, courteous refund. And keep the eight prints for your trouble.

This product amazes everyone that sees it, and is a fantastic gift for the holiday season. However, it is in short supply. To make sure of getting one for yourself, take a moment and call our toll-free number for your own home trial. Then prepare to enjoy an incredible advance in photography.

ORDER TOLL FREE.

For fastest delivery, credit card holders may call toll free. Order product #VV860 for the Vivitar. Or send a check for $149 plus 4.50 delivery. CA residents add 6% sales tax.

800 344-4444
In Alaska and Hawaii 800 227-3826

THE SHARPER IMAGE®
406 Jackson Street, Dept. 8940
San Francisco, CA 94111
©1982 The Sharper Image

Call toll free for our catalog of innovative products.

Polaroid film back accepts new Polacolor ER 669 and Polacolor 2 films, available at any camera store. Plus Polaroid 665 black and white film that produces both prints and negatives.

35mm slide slot is wide enough for two sandwiched slides, or 2 × 2" color filters for creative special effects.

Set your exposures automatically, or use manual settings to correct under or over exposures.

Illuminated slide preview allows adjustable horizontal cropping to improve picture composition.

LED light verifies accurate exposure. Built-in electronic timer beeps at 35 seconds for black and white, 70 seconds for color.

Telescopes from Celestron®

Will Take You To Places You've Never Been To Before
• Versatile • World's Largest Selection • Supremely Affordable

With a Celestron, the modern standard of high quality, affordable telescope performance, you can explore the craters of the Moon, the rings of Saturn, twirling galaxies and glowing nebulae. You can easily use a Celestron to photograph and view terrestrial subjects.

All Celestron telescopes have laser-tested, diffraction limited optical systems with hand-figured optics made in the U.S.A.

Celestrons® are available from 1.2- to 14-inches in diameter including the world's most popular modern telescope, the versatile Celestron 8. And, remember, most 35mm cameras easily attach to the Celestron for photography.

Free 8-page brochure or send $3.00 for 52-page full-color catalog on how to select and use a Celestron telescope/telephoto lens.

Celestron® International
2835 Columbia St. (Box 3578-SM2), Torrance, CA 90503, U.S.A. Telephone: (213) 328-9560

Dealer inquiries invited.

SMITHSONIAN SUBSCRIBER SERVICE

In order to:

- Change your address
- Inquire about . . .
  - *The status of your membership-subscription*
  - *Dues payments*
  - *Gifts*
- Report missing issues or membership cards
- Correspond about related matters

Please write to our computer data center where all these records are maintained and processed:

SMITHSONIAN
MEMBERSHIP-SUBSCRIPTION DATA CENTER
P.O. BOX 2955 BOULDER, COLORADO 80322 TELEPHONE (303) 493-1037

TO CHANGE YOUR ADDRESS—

Send us an address label from a recent issue together with your new address, or fill in the information below. Please give us 6 weeks advance notice.

NAME _____

OLD ADDRESS _____
CITY _____
STATE _____ ZIP _____

NEW ADDRESS _____
CITY _____
STATE _____ ZIP _____

of North American birders (SMITHSONIAN, October 1979), once wrote: "If at the end of ten years of field work you can say you know the fall warblers, you are doing very well." It is now believed that the similar winter plumages of warblers help reduce aggression between the various species wintering together, and also help the birds gain acceptance in a mixed flock.

The vivid orange throat of the Blackburnian Warbler (below), for example, becomes a duller yellow in autumn. A study in northern Colombia showed that the Blackburnian has a socially subordinate place in the pecking order of mixed flocks. A more dramatic change of plumage takes place in the Bay-breasted Warbler. Dressed in the breeding season in rich browns, in August it molts into a dull green plumage maddeningly similar to that of several other warblers.

When Bay-breasted Warblers arrive in Panama in the last months of the rainy season, they show a preference for shrub habitats and young forest in wet areas. In January, at the beginning of the dry season, they shift to mature forest whose greater retention of moisture allows more of the birds' insect prey to survive. As the dry season progresses, fruit ripens in young forest and shrubby areas; by March, Bay-breasted Warblers return to this habitat and change their diet to exploit the abundance of fruit.

In addition to opportunistically

Orange throat of Blackburnian Warbler becomes duller in the winter.

THE UNITED STATES MINT
PROUDLY PRESENTS

THE 1982

George Washington

90% Silver Commemorative Half Dollar

(Actual size: 1.205 inches in diameter)

Congress and the President of the United States have authorized the United States Mint to strike up to 10 million silver commemorative half dollars to recognize the 250th anniversary of the birth of our nation's first President. This long-awaited silver coin offers a unique opportunity to own a piece of American history today. It will enhance any collection and will be welcomed as a gift to be treasured for generations to come. This coin is the:

FIRST U.S. coin to have 90% silver content since the 1964 Kennedy half dollar.

FIRST legal tender coin to be minted solely as a commemorative by the U.S. Government since 1954.

GEORGE WASHINGTON PROOF COIN

The frosted relief design and high luster of the background result in the gem-like beauty of this coin. The proofs are individually struck twice and possess magnificent detail. They are produced by the San Francisco Assay Office, have the 'S' mint mark and sell for $10.50 each.

GEORGE WASHINGTON UNCIRCULATED COIN

A brilliant coin finish enhances these newly minted uncirculated coins. They are produced by the same high standard coining techniques as are used for circulating coinage. These exclusive silver uncirculated coins are produced solely by the United States Mint in Denver. They are designated with the 'D' mint mark and sell for $8.50 each.

FOR ORDER INFORMATION: Bureau of the Mint, 55 Mint Street, San Francisco, CA 94175 **(415 / 974-0780)**

ORDER FORM for the 90% Silver Commemorative Half Dollar

SM-100

INITIAL INITIAL LAST NAME

STREET ADDRESS

CITY STATE ZIP

Item	Quantity	Unit Cost	Total Cost
Proof	_____	$10.50	_____
Uncir.	_____	$ 8.50	_____
Total Coins	_____	Total Enclosed	_____

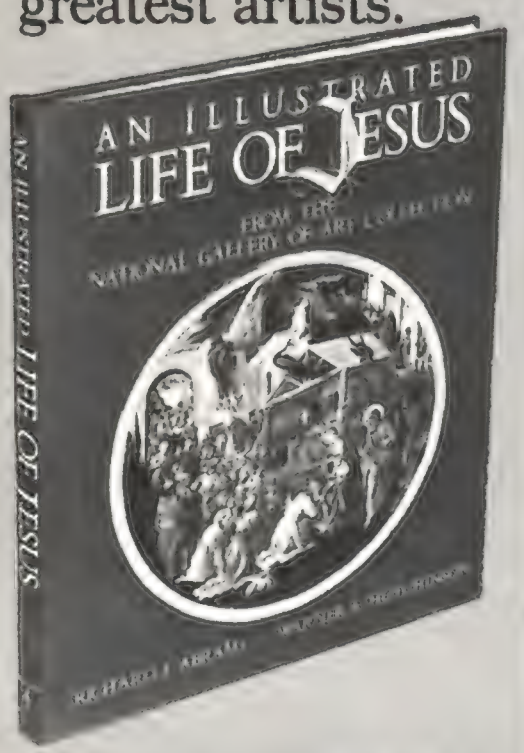
Refunds will be made if your order cannot be accepted--orders are not cancelable by purchaser. Order acknowledgements will be sent.

Please allow several months for delivery of order.

Make payment to: BUREAU OF THE MINT (DO NOT SEND CASH)

UNITED STATES TREASURY MAIL ORDER TO: BUREAU OF THE MINT, 55 MINT STREET, SAN FRANCISCO, CA. 94175

Experience the grandeur of history's greatest event through the eyes of history's greatest artists.



The National Gallery of Art, in cooperation with Abingdon, presents the most beautiful book of the year. It is a magnificent—and unique—portrayal of Christ's life as seen in the work of master artists. Included are ninety-four superb reproductions, many never before in print. Along with the art, the authors provide informative summaries of the Gospel passages which inspired the works and brief sketches of each artist's life.

An Illustrated Life of Jesus is the major publishing event of 1982. No other book published this year matches it in the beauty of its production nor the majesty of its content. It is a volume you will treasure all your life.

$35, **Regular Edition** ($40 after 12/31/82)

$60, **Deluxe Edition** ($75 after 12/31/82)

$300, **Limited Numbered Edition** (only 250 copies of this leather-bound keepsake have been printed)

Order from your local bookstore or

Abingdon

201 Eighth Ave., So., Box 801, Nashville, TN 37202

shifting habitats over the course of the winter, Bay-breasted Warblers also change their behavior. During the rainy season, when they feed on insects in shrubby areas and young forest, they are territorial, but as soon as they shift to mature forest their social tolerance increases. Here they join mixed-species flocks that move through the forest from near ground level to the canopy 100 feet above. As many as 15 Bay-breasted Warblers may be members of such a flock, while not far away in young forest other individuals remain territorial.

When the birds shift their diet to fruit they become even more tolerant. Even where fruiting trees are evenly dispersed, the warblers cluster at a few. This is undoubtedly an antipredator behavior—it is safer to join others when food is abundant.

Another of the "confusing fall warblers," the Tennessee Warbler, is even more flexible. In addition to gleaning insects from the foliage, as do many warblers, it takes large amounts of nectar. In Panama one of its favorite nectar sources is *Combretum fruticosum*, a small bush or, more commonly, a vine covering the crown of a tree, that flowers in the dry season. Individual Tennessee Warblers exclude others from these flowers, defending areas approximately a yard square by making loud *chip* sounds and by chasing intruders.

Each *Combretum* flower contains six to eight stamens tipped with reddish anthers and pollen, which soon colors the face and throat of any bird that probes inside. Thus successful *Combretum* defenders are distinguished by red faces that stay with the birds after they leave the plant, perhaps for several days. It seems likely that with this obvious mark of successful aggression, "war painted" individuals more easily gain access to new *Combretum* vines. This would facilitate cross-pollination for the plant and thereby explain the significance of its red pollen.

When its winter habitat was disturbed, Hooded Warbler required more territory

But other Tennessees are highly gregarious, joining members of their own species as well as mixed flocks. Aggressive *chips* are replaced by soft *zeep* sounds, expressing a "friendly" intent. The foliage-gleaning Tennessees are intensive foragers, specializing in probing living leaves for larvae. The concentration required makes it difficult for them to watch carefully for predators, so their high social tolerance while foraging for insects may be related to predator avoidance—the more birds present, the more likely one will spot any danger.

A few wintering birds depend on residents for survival. The Golden-winged and Blue-winged Warblers forage by probing into dead, tightly curled leaves that are still clinging to their parent branch. Like their close relative, the Tennessee Warbler, they join mixed-species flocks where they can forage intensively, sticking their

After its wooded Mexican habitat was cleared Swainson's Thrush left the area.

"Sheraton,
you've got taste."
And the more you travel for business or pleasure,
the more you'll appreciate the good things that
happen when you call this number:
800-325-3535
OR CALL YOUR TRAVEL AGENT
Sheraton
HOTELS & INNS, WORLDWIDE

Tahiti, Easter Island, Santiago, Lima.

Our Golden Triangle Tour leaves Los Angeles to Tahiti, Easter Island, Santiago and Lima. With an optional side trip to intriguing Machu-Picchu.

Other flights of fancy include: Project Antarctica; Project Amazon; Archaeological Grand Tour and more.

LanChile AIRLINES
We know South America best.

For more information **call your travel agent** or call (800) 327-3614. In Florida (800) 432-4081. In Miami (305) 593-2110.

Ms. Bertha Alvarez, Tour Manager
Lan Chile Airlines
7855 N.W. 12th Street
Suite 118
Miami, Florida

Please send a free brochure.

NAME

ADDRESS

CITY/STATE/ZIP

Worm-eating Warbler defends its nest in spring (above), or mixed-species flock it is attached to in winter, as "territory."

FREE FALL CATALOG.

AROUND THE OUTDOOR WORLD IN 84 PAGES.

Nobody gives you more for the great outdoors —in one place—than we do. EMS searches the globe to give you the best selection of functional, fashionable sportswear, and outdoor gear of all kinds. All with our *100% satisfaction guarantee.*

☐ YES! SEND YOUR NEW FALL CATALOG. FREE!

Name

Address

City

State Zip

Eastern Mountain Sports, Inc.
115082 Vose Farm Road, Peterborough, NH 03458

heads inside dead leaves or looking under branches, while other members of the flock—with less intensive feeding methods—watch for predators.

These two species lack the Tennessee's flexibility, however, never becoming gregarious with their own species. When they join a mixed-species flock, they appear to treat it as a territory, and drive away members of their own species.

On Jamaica, the Worm-eating Warbler (above) behaves in a similar manner. Like birds that defend a site as winter territory, those that "defend" a flock as territory retain their well-marked breeding plumage.

It is evident that for some migrants, their evolutionary course has been affected more by the time spent in the tropics than by the time spent in the North during the breeding cycle. For example, the Cape May Warbler, while it eats insects in the North, specializes in nectar and juices sucked from fruit when it winters in the Caribbean. So that it can exploit this winter food supply more efficiently, it has evolved a tubular tongue that is unique among warblers.

Another warbler, the American Redstart, both gleans insects from foliage and takes others from the air by "hawking," which expends more energy and is therefore a less efficient feeding method. But wintering Redstarts hawk significantly more, suggesting that this species' broad, flycatcherlike bill is an evolutionary response to optimize feeding during the time it is in the tropics.

Thus, all in all, we North Americans may not be justified in thinking of our spring and summer neighbors

The Bell System is giving American orchestras a hand.

The Bell System American Orchestras on Tour program is taking 30 major symphony orchestras to over 280 cities across the United States.

It's our way of helping orchestras reach places and people they might not have reached before –not merely an extension of our business, but a part of it.

Our commitment to quality goes beyond keeping your communications system the best in the world. It also extends to reaching people from coast to coast with fine music.

Bell System

as "our" birds. But that should not reduce our concern for their survival. Recent breeding-bird censuses taken in undisturbed forests around Washington, D.C., have shown an annual decrease in the number of pairs of those birds that winter in the tropics, as compared with the numbers recorded on censuses of the same plots 20 or 30 years ago. The decreases correlate very neatly with the rate at which wintering habitat for these species is being destroyed, with territorial winter inhabitants of mature forest suffering the most.

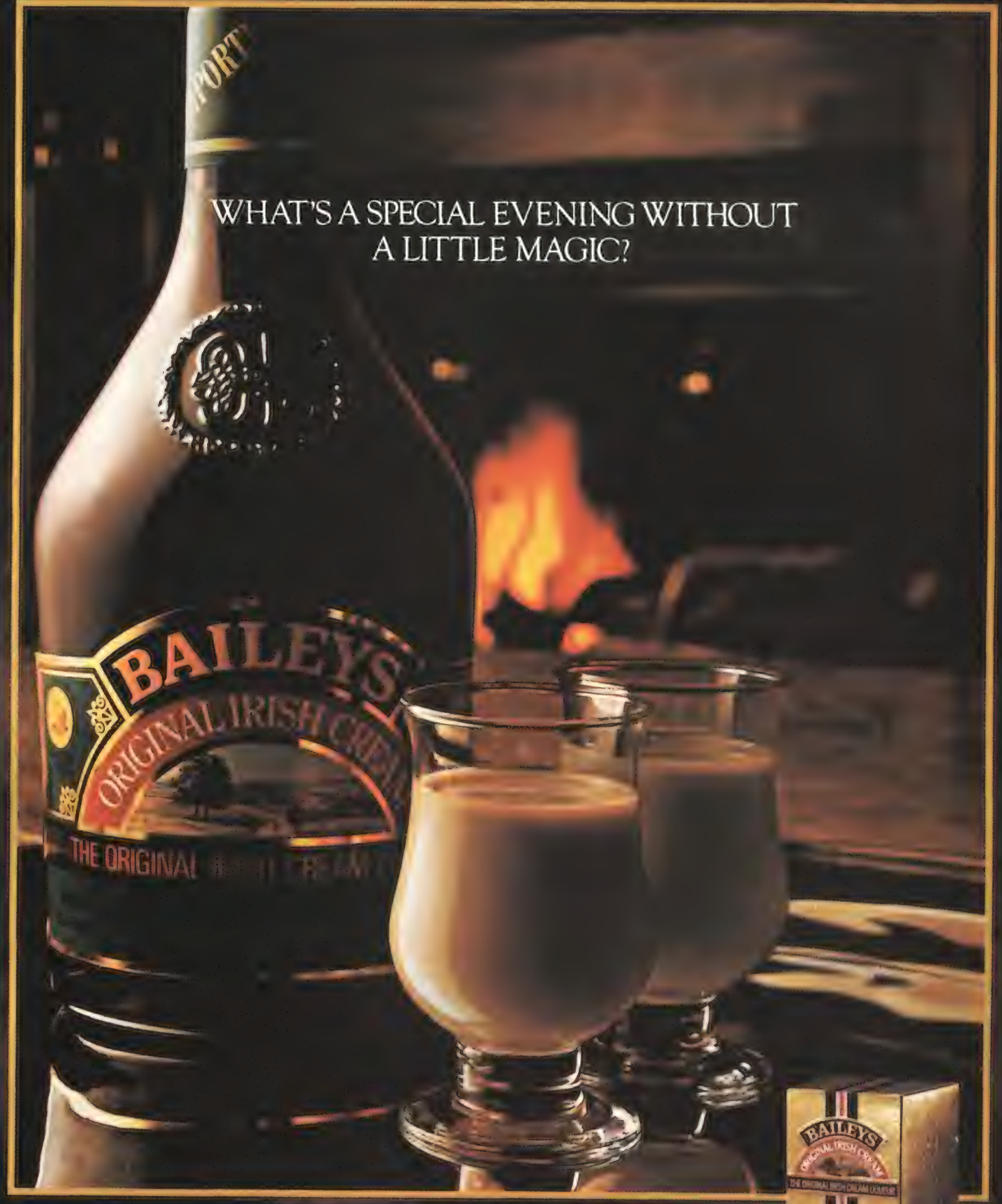
Further correlations could probably be made between the rates of forest clearance in each country and the species that winter there. In Mexico, for example, where in certain areas migrants constitute 50 percent of the total birdlife during winter, the birds are so concentrated that to remove one hectare of forest has the same effect as removing five to eight hectares in northeastern North America. With more than half the natural vegetation of Central America and the Greater Antilles already converted to cropland and pasture, and the remainder disappearing at a rapid rate, we face the prospect that suitable habitat will no longer be available for many migrant species by the end of the century. The system of parks and reserves now being established in many Latin American countries will be of some help, but the most that could be hoped for would be 10 to 20 percent of the land under some kind of protected status. Because migrant birds are already crowded in their wintering grounds, this amounts to little more than a token solution.

Some broadly dispersed species may be able to shift the focus of their wintering range to less-disturbed areas of the tropics, but this is unlikely for the many species with more constricted ranges. While no birds seem under imminent threat of extinction owing to winter-habitat loss, the chances are that many will become less common.

The prospect of fewer of our most colorful, musical and endearing birds coming north each year is a sad one to contemplate. When finally we do take that long winter holiday in the Caribbean or among the Mayan ruins, the thought that our summer bird neighbors may not be there too is sadder still.

In autumn, migrating Broad-winged Hawks circle over Panama City. There, many become insect eaters, feeding upon large katydids.

Imported by The Paddington Corporation, New York, N.Y. 34 Proof © 1981



Baileys. A unique taste so silken, so full of character, only one word can describe it. Magic.

Perhaps it's that taste of magic that has made Baileys America's fastest growing liqueur.

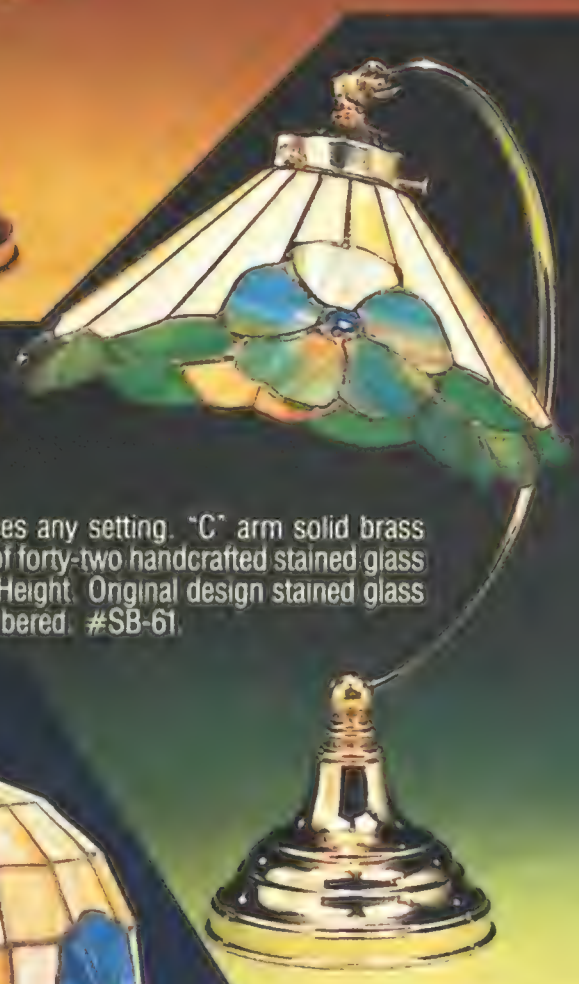
BAILEYS. TASTE THE MAGIC.

Yesterday's treasures...tomorrow's heirlooms

Our handcrafted lamps represent an investment in timeless beauty. The perfect gift... elegance and graceful style at reasonable prices... a treasure to own.

The Accent is on
Brass & Cased Glass

A masterpiece of design combining old world craftsmanship with a touch of the contemporary. Uniquely styled solid brass base is enhanced by hand-blown green cased glass shade. 17" Height. An unforgettable gift for someone special. #BC-86



Limited Edition
Stained Glass & Brass

Versatile, elegant... enhances any setting. "C" arm solid brass base with adjustable shade of forty-two handcrafted stained glass pieces. 10¼" Diameter. 16" Height. Original design stained glass individually signed and numbered. #SB-61.

Limited Edition
Stained Glass

Original limited edition stained glass lamp shade designed by Edward Behr. One hundred and sixty-two pieces hand-cut and assembled in the tradition of L.C.Tiffany. 11" dome shaped brick top design shade. 19" height, on antiqued bronze finish cast metal base. Each individually signed and numbered by the artist. (limit 2 per customer) #SG-75.

Emerald Lamp Co., Ltd.
55-50 Metropolitan Avenue
Ridgewood, New York 11385

Emerald Lamp Co., Ltd.
55-50 Metropolitan Avenue, Ridgewood, New York 11385 Dept. S-104

☐ Please send me _____ brass & cased glass lamp(s) at $99.00 each. #BC-86.

☐ Please send me _____ limited edition stained glass & brass lamp(s) at $129.00 each. #SB-61.

☐ Please send me _____ limited edition stained glass lamp(s) at $199.00 each. (Limit two per customer.) #SG-75.

Please include $3.00 each for packing, shipping & handling. (Canada, Alaska and Hawaii please include $7.00 each for packing, shipping & handling.) Enclosed is check or money order for $_____.
Credit card orders: (212) 431-8947
Please charge my credit card: American Express ☐ Master Charge ☐ Visa

Credit Card # _____ Expiration Date _____

Signature _____

Name _____

Address _____

Book reviews

The Artists Of My Life
Text and photographs by Brassaï,
translated by Richard Miller
Viking, $45

For three decades Brassaï photographed his fellow artists—Picasso, Matisse, Braque and others—for magazines like *Le Minotaure* and *Harper's Bazaar*. *The Artists Of My Life* records these visits in words and pictures, from the reticent Pierre Bonnard to the shy Jacques Villon.

Matisse at 70 sits in silent contemplation in Paris studio. "He adored being photographed," says Brassaï.

In between there were some not so bashful: "It's hard to keep the world's attention for more than half an hour," boasts Salvador Dali, who knew the game long before Andy Warhol democratized the attention but limited the duration. Brassaï notes that Dali has the anxiety of an aging clown, but even Matisse tells him: "It's not enough to have artistic talent, you need another kind of talent to make yourself felt." (This may explain why artists are so photogenic.) Brassaï, however, does not dramatize or flatter in his photographs. "I do not look for exceptional subjects; I avoid them. I think that it is daily life which is *the great event*, the true reality."

Giacometti works on statuette in studio he had for 33 years on Left Bank of Paris.

And so we see a couple in the early 1930s, Olga and Pablo Picasso, sitting in a room of their 12th-century Château de Boisgeloup. She has on her coat. He wears a hat, a scarf and a jacket. Behind them on the wall is a tapestry or painting or cartoon or curtain with three women of Picasso's "Giants" period. The photograph shows all this reflected in a large wall mirror. On the mantel in front of the mirror is a statuette of a classic-looking nude, and an ordinary round china table lamp with a pleated shade. The couple sits stiffly in wooden chairs. They appear to be entertaining another person. Pablo is giving the photographer a quick, wary glance. You cannot be surprised to learn that the marriage did not last. The details do not belong together. Brassaï had exulted: "Before the invention of photography, nothing could come to us without the eternal artist acting as interpreter. By means of the photograph, and for the first time, *things were allowed to speak for themselves.*"

We see that Bonnard liked to paint on unstretched canvases nailed to the wall, dabbing color on four at once. We see Le Corbusier standing in a sunny doorway clad in eyeglasses and bikini, and Dali (who hated everything "Corbu" did) painting in his studio dressed in a bizarre outfit of his own design. We see that thrifty Picasso has filed 34 empty cigarette boxes on the fireplace mantel in his studio on the rue La Boétie. Brassaï's skill is that while we see all this, this is not the point of the pictures. Everything in the picture is the point.

Brassaï himself writes about a photograph he discovered in an old box of notes. It was taken during the German occupation and is of a plaster cast of Picasso's right hand: "It is all of a piece, a monument to sovereign power and balance, a fleshy palm, a prominent, sensual

"Six Great Ideas": Philosopher Mortimer Adler and journalist Bill Moyers join together to explore the greatest concepts in Western Civilization. And why they are important today.

Made possible by a grant from Atlantic Richfield Company, and filmed at the Aspen Institute in Aspen, Colorado. Check your PBS television listings.

ARCO
Atlantic Richfield Company

If you have a special little niece, a grandson or other favorite child

Give the gift that turns on a child's mind.

Give HIGHLIGHTS, the world's most honored magazine for children 2 to 12. All through the year, each issue is in color. Stories, games, articles, crafts, hidden pictures . . . fun. But fun with a purpose: to help prereaders to preteens learn to read and reason.

1 year $16.95 (Postage & handling outside U.S.A. is $4/yr.) Gift rate valid to 12/25/82.

Please send HIGHLIGHTS as my gift to:

child name(s) and age(s)

address *apt. no.*

city *state* *zip*

Sign gift card "From _____"

11 • NSZN

your name

your address *apt. no.*

your city *state* *zip*

$ _____ enclosed ☐ Bill me (no need to pay till Jan. 1)

Highlights® for Children
2300 W. 5th Ave., P.O. Box 269
Columbus, Ohio 43216

••JA-C 01 • NDZ

ODOR-FREE LITTER BOX

Charcoal air filter absorbs all odor!

Breathe a sigh of relief! Charcoal filtered BoodaBox® is completely odor-free, ends litter scatter and gives cats the privacy they prefer. Treat yourself to BoodaBox®, America's best selling system.

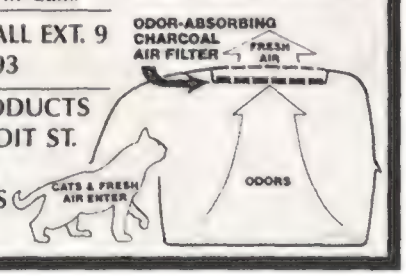
BOODABOX®

■ Easy-off locking top cannot be dislodged by cats, dogs or children ■ The canopied entry is 8"x14" ■ King size litter pan is 8" deep ■ Overall dimensions: 27"Lx16"Wx17"H ■ Cream beige ABS plastic lets light pass into interior ■ Charcoal filters last 6 mos. Replacements, $3.95 ea. (about 2¢ a day) ■ Poly Pan Liners available ■ Order forms provided with order.

$34.95 + $4 Shipping.
Add $2.27 Tax in Calif.

UNCONDITIONAL 30 DAY MONEY BACK GUARANTEE

MC/VISA CALL EXT. 9
(213) 934-1093



BOODA PRODUCTS
439 S. DETROIT ST.
DEPT. SM-102
LOS ANGELES
CA 90036

Mount of Venus, a stubborn thumb, the fingers held closely together without letting through a glimmer of light. And what clarity, what cleanly and deeply etched lines crossing this broad artisan's palm, dominated by the line of fortune rising straight as a missile to the base of the middle finger."

At 83, if Brassaï sits down beside you in his Paris apartment, he'll say right off that he is basically a journalist. As a writer, Brassaï is the artist who interprets. There is a warmth in his narration of visits with his peers. But it is the photographs, the work of the artist who does not interpret, that are moving. "My greatest ambition is to do something new and striking using the banal and the commonplace to show an aspect of daily life as if one were seeing it for the first time," said Brassaï at the time he was taking these photographs. He has succeeded.

John Loengard
Picture editor, *Life* magazine

The Book of Concord:
Thoreau's Life as a Writer
William Howarth
Viking, $15.95

Henry David Thoreau once complained that he had met only one or two people "who understood the art of Walking . . . who had a genius . . . for *sauntering*."

Both physically and intellectually, Thoreau was a saunterer. To maintain his health, he said he had to walk at least four hours a day. Thoreau's intellectual and spiritual sauntering, however, is demonstrated best not (as most might expect) by *Walden*, but by his lifelong work, his unpublished Journal.

William Howarth, former general editor of Thoreau's collected works currently being published by Princeton University Press, has literally followed in Thoreau's footsteps, hiking the same paths, paddling the same rivers, climbing the same hills. *The Book of Concord* is a perceptive and intriguing account of Thoreau's inner journeyings in the Journal by a scholar immersed in Thoreau's world, a world that is at once as provincial as Concord, Massachusetts, and as comprehensive as the universe.

(Another, quite different book, *Thoreau in the Mountains*, consisting of Thoreau's writings with editorial commentary by author Howarth, now a professor of English at Princeton, was pub-

A Triumph of Porcelain Artistry from the Celebrated Boehm Studio

★ **Issued in a Strictly Limited Edition Available Exclusively From The Hamilton Collection**

The Christmas story is beautiful in every way: but seldom has it been expressed in such a memorable form as these pure, white bisque porcelain figurines from The Edward Marshall Boehm Studio.

This unique Nativity collection is certain to add warmth and significance to the Christmas celebration for you and your family this year . . . and for many years to come.

Since its beginning more than 30 years ago, the Boehm Studio has won acclaim as one of the finest porcelain houses the world has ever known. In preparation for this landmark collection, Boehm artists carefully researched Biblical texts and explored the works of many superb sculptors. They made sketches of numerous designs . . . perfecting each detail of clothing, positioning and facial expression. Finally, the long process of modeling, reworking and final sculpting was completed after many months of dedicated work. The result is an exquisite collection of white bisque porcelain figurines portraying the most beloved event of all time – the birth of Jesus Christ.

This Christmas you can begin a holiday tradition that you and your family will enjoy and treasure for generations to come.

An Elegant Gift . . . A Cherished Heirloom

The First Noel

Nativity Figurine Collection by

Boehm

"The Holy Family"
First Issue

Strictly Limited Edition

Shown Smaller Than Actual Size
Joseph: 7½" tall

*** An Original Masterwork in Fine Bisque Porcelain, Capturing the Glory of Christmas for All Time**

The Edward Marshall Boehm Studio's long-established reputation for impeccable craftsmanship and beauty is evident in "The Holy Family." The integrity of the collection is assured by two subsequent issues portraying the Three Kings, the vigilant shepherd with his sheep, the donkey that carried Mary to Bethlehem, and the angel who heralded the sacred birth. "The Holy Family" is available now, and the final two issues will be made available next year.

The collection will be issued in this one, single edition, which will forever be limited to the exact number of reservations that are received by December 31, 1985. *But only those who order by the deadline date shown in the coupon will be guaranteed delivery of the first issue, "The Holy Family," in time for Christmas this year.*

However, because of the amount of handcrafting involved with each figurine, it is strongly advised that you place your order as soon as possible. In doing so, there is no risk to you whatsoever – The Hamilton Collection's 100% Buy-Back Guarantee assures you a full 30 days to inspect each issue in your home before deciding to acquire it.

Reserve your collection *today* by sending the attached coupon to The Hamilton Collection – 1 Charter Plaza, P.O. Box 2567, Jacksonville, Florida 32203 – or use this toll-free number to order your collection:

Call Toll Free, 1-800-228-2028 ext. 148.

Nebraska residents call 1-800-642-8300 ext. 148.

For delivery by Christmas, order by: Nov. 12, 1982 *Limit: one collection per subscriber*

Please accept my subscription for *The First Noel* Nativity Figurine Collection, consisting of nine bisque porcelain figurines, issued in three sets beginning with "The Holy Family." I understand that the remaining figurines will be issued to me in sets of three at the rate of every three months.
The original issue price for each set is $135, payable in three equal installments of $45* each. The first installment is due prior to shipment, the second installment will be due upon receipt of the set, and the third installment will be due approximately one month after receipt.

I prefer to pay for the first installment of "The Holy Family" as follows:

☐ **With this order,** I enclose my initial payment of $45.00*.
☐ **By credit card.** Charge $45.00* to my credit card (check one):
☐ Master Card ☐ Visa ☐ American Express ☐ Diners Club

1836 851 HC-510-E

Account number_____ Expiration Date _____

***Florida residents add $2.25 sales tax. Illinois residents add $2.70 sales tax.**

Name_____ Signature_____

Address_____

City_____ State_____ Zip_____

All applications are subject to acceptance by The Hamilton Collection. Please allow eight weeks for delivery.

The Hamilton Collection

©1982 The Hamilton Collection

1 Charter Plaza, P.O. Box 2567, Jacksonville, FL 32203

WALNUT TIE HANGER

ORGANIZES 40 TIES

The easiest way to organize your ties—keeps them neat and wrinkle-free. Tie hanger is constructed of solid walnut with a beautiful hand-rubbed finish, complemented with brass metal parts. Gold plastic riders hold ties in place. 11" hanger holds 40 ties. Complements any man's wardrobe. Makes a perfect gift. Fully guaranteed.

☐ Send____Tie Hanger(s) @ $13.00 ea., 3 or more $11.50 ea. Postpaid in U.S.A.
☐ Send FREE 72 page catalog.
☐ Check enclosed
☐ VISA ☐ MASTER CARD Exp. Date

Card Number

CALL SPORTY'S TOLL FREE 1-800-543-7638
OH, AK, HI, PR & VI 513-732-2411

Name_____
Address_____
City_____
State_____ Zip_____

sporty's tool shop
Clermont Airport • Batavia, OH 45103

LYNCHBURG
HARDWARE & GENERAL STORE®
44 Main St., Lynchburg, TN 37352

FIREPLACE BELLOWS

Made from solid pine and stained walnut, each bellows has a hand carved mallard design. Complete with a strong leather lung, copper tip and rawhide thong for handling, it is a practical and handsome fireplace tool. You'll be proud to hang it by any hearth. About 22" long. **$27.50** delivered.

Send check, money order or use American Express, Visa or MasterCard, including all numbers and signature. (Add 6¾% sales tax for TN delivery.) For a free catalog, write to Eddie Swing at the above address. Telephone: 615-759-7184

lished by Farrar, Straus & Giroux last month; it is drawn from Thoreau's explorations of New England.)

Thoreau's Journal is an extraordinary document. It consists of more than two million words, 13 of the 28 volumes of Thoreau's work. Begun in October 1837, and spanning a quarter of a century, it marks Thoreau's continuous ascent, Howarth writes, from "youthful confusion into a triumphant maturity"; it contains the man's essence, an essence that did not suddenly flower in Walden, but developed over the years.

When Thoreau began his Journal, he had no idea where it would lead. At first, like Emerson, his fellow transcendentalist and early mentor, Thoreau used the Journal merely as a carpenter's bench on which he could measure and shape his observations into publishable form. The Journal was little more than a storehouse or lumberyard from which he periodically lifted entire sections.

Too idiosyncratic and too self-reliant, too much his own man, Thoreau eventually parted from Emerson and discovered that he expressed his genius best in the obscurity and independence of his Journal. Howarth notes the Journal's subtle shifts, like unexpected bends in a great river. Eventually it became Thoreau's preoccupation, his life's magnum opus, a work of art as isolated and complete as the line sketches of scarlet oak leaves scattered throughout its pages.

Howarth meticulously traces the growth of Thoreau's literary talent and the deepening of his vision. On his walks, Thoreau scribbled down field notes which he later expanded in his Journal, sometimes writing as much as 8-10,000 words a day. The entries are at times playful and witty, with colorful dialogue and sharp portraits of people he encountered; at other times, the entries are scholarly and objective, as if he were composing a scientific treatise. All the literary devices at a writer's disposal Thoreau used "to make facts flower into truth." Nature's seasons—its seedtime, growth, flowering and final burst into autumnal glory—merged with Man's seasons. Nature to Thoreau was a great book, his Bible, an emblem of Man. In time, the Journal grew into nature's book, and Thoreau himself into a kind of mirror reflecting nature.

To the dismay of his contemporaries, particularly Emerson and Bronson Alcott, Thoreau was a stay-at-home, declining invitations to travel far afield. No matter, Howarth writes, Thoreau saw the world in a grain of Concord sand, discovering truth and principle in a leaf's flutter, a snowflake falling. "To appreciate a single phenomenon. . ." Thoreau wrote in late 1852, "you must camp down beside it as for life . . . and give yourself utterly to it. It must stand for the whole world to you, and [be] symbolical of all things."

Taking Thoreau's statement to heart, William Howarth has camped down beside the Journal and produced a superb study. But his book is only a quick, very informative walk through the premises; Thoreau might be inclined to dismiss it as mere tourism. He would be partially right, and Howarth would probably concur. The greatest proof of the success of this book is that the reader leaves it unsatisfied—eager to read, to walk, to saunter with Thoreau himself.

Paul Piazza
Chairman of the English department,
St. Albans School, Washington, D.C.

Edward Jenner: The Cheltenham Years 1795-1823
Paul Saunders
University Press of New England, $27.50

The great pox was apparently syphilis, whose victims suffered its disruptive effects in shame. The small pox was variola, not less disruptive than the great pox, but less delicate a topic. The scourge of "small pocks" has been known since ancient times, when one who was ill with it was believed to have been struck down by an angry god or goddess, or a magical spell. In modern times, while countless victims continued to die and to be permanently disfigured, effective immunization systems were sometimes delayed by misguided moralists and opportunists citing the will of God.

The book documents with unassailable detail the tragic battle of a medical pioneer who placed humanitarian concerns above the degrading pettiness of the deceiver and the deceived.

Approximately a quarter-century before Edward Jenner was born, Lady Mary Wortley Montagu, the talented wife of a British ambassador to Turkey, brought back to England from her Eastern travels information about a system of inoculation against smallpox. The "variolation" hospitals that were subsequently established

Eddie Adams

The Children of War.

One thing they all share is a will to survive; it may take the form of revenge, or an abiding serenity.

"It occurred to me that in many parts of the world, there are children who have known nothing but war," said TIME Senior Writer Roger Rosenblatt. And from that moment of empathy sprang an enterprise that is unique for TIME Magazine, and perhaps for all of journalism: an unprecedented exploration of the thoughts and feelings of the children growing up on the world's battlegrounds, children for whom war is a natural condition.

In a five-week, 25,000-mile odyssey, Rosenblatt met with hundreds of the children of war in Northern Ireland, in Israel, in Lebanon; with Cambodian refugees in Thailand; with Vietnamese boat people in Hong Kong. He talked with them, trying to learn what they believe in, what games they play, what the future might be like in their hands.

And out of experiences that make the heart ache emerged a sense of the most astounding resilience, of the most wonderful charity, justice and forbearance.

An exceptional story, even for TIME; but consistent with the qualities that have made TIME magazine preeminent in its field.

Not merely a clear presentation of events, nor merely intelligent commentary on events, but an uncommon sensitivity towards the people who are living the events. Another reason why, each week, millions more people read TIME than any other news magazine.

You get more out of TIME, because more goes into it.

More goes into it.

©1982 Time Inc

18th Century Furniture Kits
Solid Wood & Solid Brass

Two of the 27 Bartley classics, in hand-crafted solid mahogany, ash, or cherry. Totally authentic in design and beautifully constructed. Each kit is easily assembled and finished in your own home.

WINDSOR CHAIR*
CIRCA 1760

BLOCK FRONT CHEST*
CIRCA 1760-1780

Henry Ford Museum Reproductions

COLOR CATALOG $1.00 WITH THIS COUPON

I WANT TO BUILD THE BEST SEND ME YOUR COLOR CATALOG
"Without doubt the top quality kits . . . is from the Bartley collection" *Workbench*

Name _____

Address _____

City/State/Zip _____

The Bartley Collection, Ltd.®
747 Oakwood Avenue, Dept. S 430, Lake Forest, Illinois 60045

TWO ALL-NEW CRUISE ITINERARIES

☐ TAHITI IN THE SOUTH PACIFIC
DEPART PAPEETE 4 TO 9 NIGHTS FROM $749

☐ PANAMA AND THE CANAL
DEPART PANAMA CITY 4 TO 9 NIGHTS FROM $649

These unique new cruises visit areas never before accessible...until we introduced EXPLORER CLASS™, a totally new concept in quality cruise experiences.

☐ **CRUISE TAHITI**
Embark at **Papeete**, cruise **within** crystal-clear lagoons, close to the scenery of this mythical Bali Hai. Visit **Bora Bora, Huahine, Raiatea, Tahaa** and **Moorea**, all with varied shore excursions.

☐ **CRUISE PANAMA**
From **Panama City,** transit the **Canal**, cruise the **San Blas** and **Pearl Islands, Spanish Main Gold Ports**, visit **Primitive Indians** in the lush **Darien Jungle; LOWEST COST CANAL CRUISE!**

UTA French Airlines

Cruise in comfort aboard our new **Explorer Class™** vessels, featuring **four passenger decks, air conditioned staterooms,** picture window **dining room, lounge with bar** and spacious **sundecks.** After each cruise, extend your stay with optional interludes at world-famous resorts.

Before you select ANY Fall/Winter Cruise, review our free full-color brochures; see your travel agent, mail coupon, or call toll free:

800-426-0600
(in Washington State call: 206/624-8551)
Ask about
SPECIAL AIR FARES!

EXPLORATION CRUISE LINES™
1500 Metropolitan Park Bldg., Dept. AIN, Seattle, WA 98101

Please send me a free copy of your new Cruise Brochure(s): ☐ TAHITI ☐ PANAMA

NAME

ADDRESS

CITY STATE ZIP

in the West provided a source of revenue for many doctors, but the system of infecting the well person with pustule matter from the ill could be risky. Although it offered a greater possibility of recovery than if one were stricken by chance during an epidemic, the ambulatory patient with an active case of smallpox was an effective carrier to those not immunized.

By contrast, Jenner's "vaccination" system (from the Latin word for cow) inoculated with cowpox rather than smallpox, on the principle that cowpox, transmitted to Man, is harmless. Had Jenner protected his secret, he could have become wealthy. As it was, possessed of neither position nor greed, he watched in quiet dignity while those around him profited from his research—"the most poverty-stricken great man in Europe." It was Cheltenham that sustained him when London did not. As a matter of fact, miraculously, as Saunders makes clear, "Jenner rode to victory amid the most licentious society in England and supported by a nobility of rakes and courtesans."

In the thick of the artistic, literary and diplomatic three-ring circus that was a Cheltenham season, Jenner modestly poetizes and parties, meanwhile minister-

ing to nobility and theater stars—and vaccinating the region's poor.

Impoverished husband of an invalid wife, father of three children—the oldest apparently retarded—Jenner waits for England to reward him. "From potentate to peasant, in every country but this, she (vaccina) is received with open arms," was his poignant observation in 1804. While under Jenner's more socially privileged disciples, England's colonial interests—India, Ceylon (now Sri Lanka)—became free of "the speckled monster," vilification of Jenner and of vaccination continued at home: published prints and caricatures depicted in scurrilous detail how the introduction of cowpox into humans would encourage bovine growths.

The final awarding of Jenner's Parliamentary grant came tardily. Meanwhile, often without remuneration, he personally dispatched the requested serum all over the world. In America, Thomas Jefferson presided over a mass vaccination; chiefs of several American Indian nations expressed their appreciation ("We shall not fail to teach our children to speak the name of Jenner"). Ironically, Napoleon Bonaparte gratefully vacci-

Vivaldi's 'Mandolin Concerti'

is Yours For Only $1.00

with your FREE-NO PURCHASE-OBLIGATION membership

Vivaldi's *Mandolin Concerto in C Major* is a work of such captivating beauty and universal appeal that once it is heard, the listener is almost compelled to hear it again and again. This fact was experienced by hundreds of thousands of viewers of the Academy Award winning movie *Kramer vs. Kramer*, in which this Mandolin Concerto was featured.

A brief movement from a Vivaldi mandolin concerto was played frequently for one week on a "pop" radio station. The reaction of the station's listeners was astonishing—after this exposure the disc sold some 80,000 copies! This is the record that was played by the station!!

Now you, too, can enjoy a copy of this out-of-this-world recording for only $1.00 ($2.00 for cassette) along with your FREE-NO OBLIGATION membership in the Musical Heritage Society.

GET "SELECTIONS FROM OUR MASTER CATALOG" FREE!

The Musical Heritage Society has been acknowledged as "the Nation's treasure house of obscure as well as familiar classical music."

With your introductory recording, we will include "Selections from Our Master Catalog" containing records and cassettes covering every musical period, carefully chosen from our collection of almost 3,000 records and cassettes.

The Musical Heritage Society issues each year about 200 new recordings of the music of such great masters as Albinoni, the Bachs, Beethoven, Berlioz, Buxtehude, Charpentier, Corelli, Couperin, Gluck, Handel, Haydn, Lully, Monteverdi, Mozart, Pergolesi, Purcell, Scarlatti, Schubert, Telemann, Torelli, Vivaldi, and many others. Its recordings cover all musical periods: Medieval, Renaissance, Baroque, Rococo, Classical, Romantic, and Modern. Over 200 of its recordings have been honored with the coveted GRAND PRIX DU DISQUE and other international awards.

Most of the Society's records are of works recorded FOR THE FIRST TIME! Manufactured to the highest quality standards of which the recording industry is capable, the Society's records are perhaps the finest in the country.

HOW THE SOCIETY OPERATES

The Society's recordings are not sold in stores. They are offered directly through the MUSICAL HERITAGE REVIEW magazine at three-week intervals. As a member, you'll enjoy substantial savings. Member prices are $4.95 per LP or cassette, plus postage and handling (deluxe-boxed editions and digital recordings are slightly higher).

When the Society receives your request, it sets up an account in your name and begins sending your free one-year subscription of the MUSICAL HERITAGE REVIEW for your edification and delight. There is NO PURCHASE OBLIGATION and you may discontinue the complimentary subscription at any time. As a subscriber, outstanding selections will be scheduled for shipment to you from each issue—but there is no obligation to accept them...order only those you want when you want them!

A special response form will be enclosed with each Review...and you may use it to order or reject any selections simply by mailing it by the date specified. And if you want only the scheduled selections, you need do nothing—they will be shipped to you automatically. What's more, you'll have at least 10 full days in which to make your decision—if you ever have less time than that, just return the special selections at our expense, for full credit.

Unforgettable Moments of Musical Pleasure Await You—Send for this Record or Cassette and your Free Society Membership Today!

All applications are subject to review before membership is granted.

MUSICAL HERITAGE SOCIETY *0531505

14 Park Road, Tinton Falls, N.J. 07724

Ladies and Gentlemen of the Society:
Please send me Vivaldi's MANDOLIN CONCERTI along with my FREE copy of "Selections from Our Master Catalog." You may enter my subscription to the Society's recording program and set up an account in my name. However, it is understood that I may cancel at any time, and there is absolutely no purchase obligation on my part. My payment for this order is enclosed.

SEND "MANDOLIN CONCERTI" IN THIS TYPE OF RECORDING:

☐ Record #1100H, $1.00 ☐ Cassette #2217Y, $2.00

☑ #9037Y "Selections From Our Master Catalog"

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Send my FUTURE selections in: ☐ Records ☐ Cassettes

OFFER OPEN TO NEW MEMBERS ONLY
Offer Valid Within the Connecting United States Only

ALMONDS
in 6 Delicious Flavors

Ideal gift for your family, friends, business associates...or just to enjoy yourself. Six 4-oz tins of premium grade California Almonds, each a tantalizing taste sensation. Roasted Salted, Blanched Roasted Salted, Cheese, Hickory Smoke, Barbecue and Ranchero... packed in handsome gift box...100% guaranteed to please. $11.95, prepaid in USA.

☐ *Send____ Gift Box ALMOND TANTALIZERS at $11.95 each, prepaid within USA.*
☐ *Send FREE House of Almonds Catalog.*
☐ *Enclosed is check or M.O. for $ _____*

VISA & MASTERCARD
Send card number & expire date or phone toll-free.
800-235-4070 (from Calif. 800-582-3923)

Offer Expires 12/31/82

NAME
ADDRESS APT.
CITY
STATE ZIP

5300 District Blvd., Dept UE-8, Bakersfield, CA 93309

House of Almonds

*Winterthur*tm

Gifts from America's foremost museum of decorative arts

32 pages, full color
Send $1.00 for postage and handling to Winterthur Museum, Marketing Office, SMSN, Winterthur, DE 19735

nated his subjects; Saunders remarks wryly that "he probably thus saved more lives than he took."

Until his death at 73, Jenner expended his creative energy defending the discovery he had already made by the time he was 31. Orphaned at five, without the resources to study at Oxford or Cambridge, made Doctor in Medicine at 43, Edward Jenner was internationally honored, but bypassed for honors at home.

In researching Jenner's 28-year practice in Cheltenham, Paul Saunders at long last has sought to rectify the slight—yet even this monumental effort seems in danger of neglect. For the new biography, ten years in the making, was originally undertaken when its author, who has been a critic, English teacher, headmaster and conservationist, began a campaign to save Jenner's house from destruction. Deplorably, before the book saw the glimmer of publication, the object of its author's labor of love was demolished. As a result, it is not the house but this handsome volume, of tremendous scholarly importance, that remains as an appropriate tribute to Jenner's achievement.

Ailene S. Goodman
Washington writer and researcher

Conversations with Arrau
Joseph Horowitz
Knopf, $17.95

As he approaches his 80th year, Claudio Arrau is acclaimed almost globally as one of the giants of present-day pianism. This revealing book tells us why.

It is arranged in a series of "Conversations," each prefaced briefly by the author and set forth in chronological order. The first five span Arrau's life. The next eight cover many topics—his youthful exposure to the great musicians who frequented Berlin in the Twenties; piano techniques and interpretation; the composers Liszt, Brahms, Chopin and Beethoven (whose music is the core of Arrau's repertoire)—as well as more intimate glimpses into his life: his fondness for dogs, appetite for reading, religious beliefs, politics and taste in films (he loved John Travolta's dancing in *Saturday Night Fever*). In the section called "Conversations about Arrau," the reader sees the pianist through the eyes of a former pupil and close friend, Philip Lorenz, and those of fellow superstars Daniel Barenboim, Garrick Ohlsson and Sir Colin Davis. Their

THE UNICORN

ACTUAL SIZE

Beautiful 14K gold 3-D unicorn cast and diamond-cut with sharp detail. Price: $150.00 (Calif. res. add tax). Allow 4-5 weeks delivery. Satisfaction assured or return within 15 days for refund. Mail check or money order.

CASA DI ORO
533 Sutter, Suite 1704
San Francisco, CA 94102

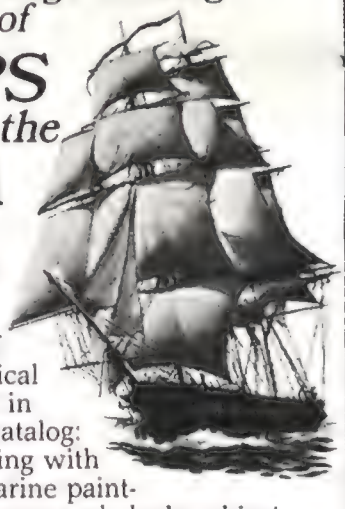
Batiks of Indonesia
Hand-printed 100% Cotton

Tablecloth/napkin sets–$39.95-$58.95
Ingenious expanding Tote-bags–$18.00
Apron/potholder sets–$22.95

Send for Free brochure:

M. L. E. International
Box 206S10
Custer, WA 98240

FREE 112 Page Catalog for Lovers of
SHIPS and the SEA



You could shop for months and never find the hundreds of decorative nautical ideas illustrated in Preston's new catalog: 112 pages teeming with ship models, marine paintings, nautical lamps and clocks, ships' wheels, figureheads and scores of other nautical ideas for the Home.

PRESTON'S
67-M Main St. Wharf, Greenport, N.Y. 11944

How To Demand Quality! Build your own Teak Deck Chair

Enjoy outstanding value, exacting quality, and pride of ownership. Designed for comfort, it will complement your deck, patio, or family room. Made of teak wood with solid sand-cast brass hardware. Measures 58" l × 22" w. Satisfaction Guaranteed.
A26110-KE **$179.95** postage paid

☐ **Send FREE Color Kit Catalog.**

Name _____
Address _____ Zip _____
City _____ State _____

Woodcraft Supply Corp., 41 Atlantic Ave., Dept. KS102
P.O. Box 4000, Woburn, MA 01888

thoughts on Arrau add to our portrait of the artist later in life.

When he was only eight the government of his native Chile awarded him a scholarship that enabled him, his mother, brother and sister to go to Berlin for what was to be five years of daily tutelage under the renowned Liszt pupil Martin Krause. It was a hothouse world that shattered when Krause died in 1918. Now Arrau faced dilemmas truly for the first time—declining engagements, a lack of guidance, bouts of anxiety, the loss of his scholarship, a disastrous American tour.

After six precarious years, he went into psychoanalysis. His doctor, Hubert Abrahamsohn, became both father figure and close friend in a relationship that endured for almost half a century. This explains Arrau's absorption in the subject of the mind and its workings. The story of his therapy is fascinating. As Arrau worked to overcome handicaps of memory lapses and insecurity, his career grew to encompass huge recital cycles devoted to Bach, Beethoven, Mozart and Schubert.

Claudio at 5 played Beethoven and Mozart at first recital in native town of Chillán.

Critics and the public noted the new stature of Arrau's playing as he gradually set aside much of his earlier virtuoso involvement to concentrate on the essential masters and their depths of musical expressiveness. Thus today Arrau knows no peer, for example, in the interpretation of Schumann, whose works require an unusual degree of probity. He has found new meaning for many in the music of Liszt, while continuing to demonstrate the greatness of Schubert, Beethoven, Chopin and Brahms to ever-appreciative listeners.

While Arrau's recounting of his own life's events reveals much of the musician and the man, his firsthand accounts of Eugène d'Albert, Ferruccio Busoni, Teresa Carreño, Camille Saint-Saëns and others—none of whom is well represented on records—add a good deal to the lore of the piano. With a detailed discography by T. W. Scragg, this is a book to savor, a fitting honor for an esteemed artist.

Frank Cooper
Pianist and harpsichordist
School of Music, University of Miami

Make More of Your Summer With America's Favorite Vacation

Summer weather stretches well into the fall at Sea Pines on Hilton Head Island. It's still warm enough for you to swim here!

You play golf on our three championship courses, including the famed Harbour Town Links. And we offer Free tennis through March 20, 1983.

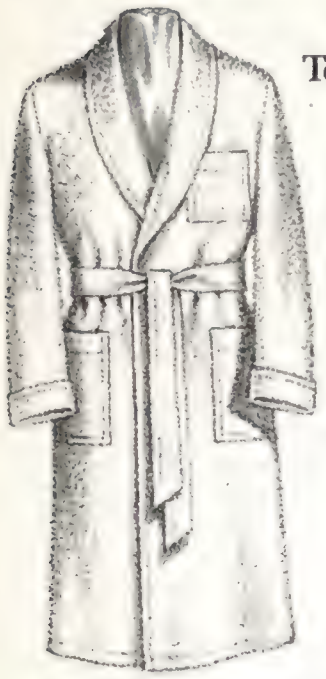
Several new fall package plans—with savings of almost 25%—make the value of your Sea Pines fall vacation better than ever.

For more fun and more value than any other resort, call us toll-free today!

Call toll-free (800) 845-6131
In South Carolina (800) 922-7042
or call your travel agent.

SEA PINES® PLANTATION
Hilton Head Island
Sea Pines Plantation, Hilton Head Island, S.C. 29928

Cable Car Clothiers
ROBERT KIRK, Ltd.
San Francisco's British Goods Store Since 1939



Our All Cotton Terry Cloth Robe
$48

For old-fashioned comfort after bath, by the pool, at the beach—our all cotton robe in soft, hook terry cloth toweling. Classic full cut, shawl collar model with three patch pockets, self belt. White, light blue or tan. Sizes S(34-36), M (38-40), L(42-44), XL(46-48). Size XXL (50-52) available in 88% cotton, 12% polyester terry cloth. Colours as above. $50.

☐ *Please send catalogue.*
Phone Orders: (415) 397-7733

Mail Orders: Cable Car/Robt.Kirk, Ltd. Q1K012
No. 150 Post St., S.F. Ca 94108 (415) 397-7733
Robe (79645Q): Size_____ Colour_____
☐ Check ☐ MasterCard ☐ VISA ☐ Amer. Ex.
Card #_____ Expir._____
Add $2.75 ship., hdlg.; CA deliv. add tax.
Name_____
Address_____
_____ Zip_____

First time in America . . .

The world's finest teas.

Savor six very rare teas from the Sir Thomas Lipton Collection. A classic gift for the connoisseur...for you.

SM-10B

Yes, please send me, at $13.50 each,_____Connoisseur Samplers containing six 1.7 oz. recloseable foil bags of leaf tea. I will receive Finest Ceylon, Yunnan, Darjeeling, Earl Grey, English Breakfast, and Golden Assam.

Name_____
Address_____
City_____ State_____ Zip_____
☐ Check Enclosed ☐ Amex ☐ Visa ☐ MC
Acct. #_____ Exp. Date_____
Signature_____
Shipping and handling included. Allow 4-6 weeks for delivery. Holiday delivery guaranteed. A free Fall catalog will be sent with your order

Sir Thomas Lipton Trading Co., Dept. SM-10B, 800 Sylvan Ave., Englewood Cliffs, NJ 07632

Additional reading

Yak caravans (p. 50)

Himalayan Traders by Christoph Von Furer-Haimendorf, St. Martin's Press, 1975

Tibet, An Account of the History, the Religion and the People of Tibet by Jigme Norbu and Colin Turnbull, Simon and Schuster, 1968

The Treasury of Good Sayings: A Tibetan History of Bon by Samten G. Karmay, Oxford University Press, 1972

Royal armor (p. 64)

Treasures from the Tower of London (exhibition catalog) by A. V. B. Norman and G. M. Wilson, Sainsbury Centre for Visual Arts, University of East Anglia. From Cincinnati Art Museum, Cincinnati, Ohio 45202, $10.

European Armour by Claude Blair, B. T. Batsford Ltd. (London), 1958

Helmets and Body Armor in Modern Warfare by Bashford Dean, Yale University Press, 1920

Chipmunks (p. 76)

Under the Apple Trees by John Burroughs, Houghton Mifflin, 1916

"The Delightful Delinquents" by Jean George, *National Wildlife*, April-May 1965

Chipmunk Portrait by Bridget and Heinz Henisch, Carnation Press (State College, Pennsylvania), 1970

'Fuskie folks (p. 88)

The Water Is Wide by Pat Conroy, Houghton Mifflin, 1972

Rehearsal for Reconstruction by Willie Lee Rose, Bobbs-Merrill, 1964

The Slave Ship 'Wanderer' by Tom Henderson Wells, University of Georgia Press, 1967

Milton Avery (p. 110)

Milton Avery (exhibition catalog) by Barbara Haskell, Whitney Museum of American Art and Harper & Row, 1982

Milton Avery by Bonnie Lee Grad, Strathcona (Royal Oak, Michigan), 1981

Milton Avery: Paintings 1930-1960 (catalog) by Hilton Kramer, Thomas Yoseloff (New York), 1962

Baseball's Kelly (p. 120)

"Slide, Kelly, Slide" by Alfred R. Cappio, Passaic County Historical Society (Paterson, New Jersey), 1962

Baseball by Robert Smith, Simon and Schuster, 1947

Baseball, The Early Years by Harold Seymour, Oxford University Press, 1960

American Baseball (Vol. 1) by David Quentin Voight, University of Oklahoma Press, 1966

Chaparral fires (p. 132)

Terrestrial Vegetation of California, edited by Michael G. Barbour and Jack Major, John Wiley & Sons, 1977

Fire in America, A Cultural History of Wildland and Rural Fire by Stephen J. Pyne, Princeton University Press, 1982

Forest Fire Control and Use by Arthur A. Brown and Kenneth P. Davis, McGraw-Hill, 1973

Morse's *Louvre* (p. 144)

"Samuel F. B. Morse and the Search for the Grand Style" by Paul J. Staiti (PhD dissertation), University Microfilms International, Ann Arbor, Michigan, 1979

"Samuel F. B. Morse's *Gallery of the Louvre*: The Figures in the Foreground" by David Tatham, *The American Art Journal*, Autumn 1981

The American Leonardo by Carleton Mabee, Knopf, 1943

Sputnik (p. 148)

History of Rocketry & Space Travel by Wernher von Braun and Frederick I. Ordway III, Crowell, 1966

Vanguard: A History by Constance McLaughlin Green and Milton Lomask, NASA Historical Series, NASA, 1970

Sputnik, Scientists, and Eisenhower by James R. Killian jr., MIT Press, 1977

Bird migration (p. 169)

Migrant Birds in the Neotropics: Ecology, behavior, distribution, and conservation, edited by Allen Keast and Eugene S. Morton, Smithsonian Institution Press, 1980

AN AMERICAN CLASSIC

The sleek elegance of a 1932 Packard, the incomparable sounds of vintage Jazz. . . the distinctive qualities that characterize an American Classic.

No record library is complete without the landmark *Smithsonian Collection of Classic Jazz*. Seventeen record companies agreed to open their archives to the Smithsonian, making possible for the first time the compilation of a definitive jazz anthology. Eighty-six classic selections highlight five decades of recorded jazz—from a Scott Joplin piano roll performance of *Maple Leaf Rag* to John Coltrane's *Alabama*. Including: Bessie Smith's *St. Louis Blues* • Jelly Roll Morton's *Black Bottom Stomp* • Louis Armstrong's *West End Blues* & *I Gotta Right to Sing the Blues* • Fletcher Henderson's *Wrappin' It Up* • Benny Goodman's and Coleman Hawkins' *Body and Soul* • Billie Holiday's *All of Me* • Art Tatum's *Willow Weep for Me* • Count Basie's *Lester Leaps In* • Duke Ellington's *In a Mellotone* & *Ko-Ko* • Dizzy Gillespie's *I Can't Get Started* • Charlie Parker's *Embraceable You* & *Parker's Mood* • Sarah Vaughan's *Dancing in the Dark* • Thelonious Monk's *Evidence* & *I Should Care* • The Modern Jazz Quartet's *Django* • Miles Davis' *Summertime* • Ornette Coleman's *Lonely Woman* • and 65 more!

". . . easily the best historical anthology ever assembled." — *Chicago Tribune*

"An absolutely stupendous gathering into one bundle of many of the pivotal masterpieces of early, classic, and modern jazz by one of the (possibly *the*) best-qualified critics in the field." — *Audio*

". . . possible for the first time to survey in one sweep the main pinnacles of the music, and what a panorama it is!" — *New Yorker*

Extra! Included in the boxed set of 6 LPs is a 46-page, large format booklet written by jazz scholar Martin Williams, who made the selections for the *Classic Jazz* set and is Director of the Jazz Program at the Smithsonian.

Six long-playing records plus 46-page booklet: $38.98 ($34.98 for Smithsonian Associates).

THE SMITHSONIAN COLLECTION

Smithsonian Recordings Order Form

Name _____

Address _____

City _____ State _____ Zip _____

Quantity	Title	Amount
	Classic Jazz	
	Shipping & Handling:	$2.50 per set
	TOTAL	

I am a Smithsonian Associate ☐ Yes ☐ No

☐ Bill Me

☐ Payment Enclosed (payable to "Smithsonian Institution")

☐ Send me the Smithsonian Collection of Recordings catalogue

Please allow 4-6 weeks for delivery

Mail to: **Smithsonian Customer Service**
P.O. Box 10230

L25

GHOSTS
A TIME REMEMBERED
1 9 8 3

Famous Aircraft of WWII
The season's most distinguished aviation calendar.

13 magnificent photographs by Philip Makanna
In Full Color
Suitable for Framing
Each page—20" x 14"
Fold-out—20" x 28"
Plus: History
Specifications
Silhouettes

$9.95 Plus $2.00 Shipping/Handling
California Residents: Add 6% Tax
Foreign Orders in US DOLLARS ONLY
Foreign Surface Mail: ADD $3.00
Foreign Air Mail: ADD POSTAGE FOR 3 LBS.

Please send me _____ "GHOSTS-1983" Calendar(s) @ $9.95 plus $2.00 handling/shipping

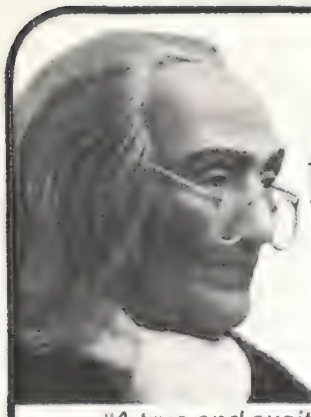
Name _____

Address _____

City _____ State _____ Zip _____

Please make check or money order payable to GHOSTS

Mail to: GHOSTS, 665 ARKANSAS STREET, SAN FRANCISCO, CA 94107



Ben and his friends want to live with you.

"A true and exciting landmark. It raises doll making to an art level beyond portraiture and sculpture, bringing a particular vitality to the person, as though he is really alive."
John Noble, Curator
Museum of the City of New York

The Living Image™ Dolls portray the Great Americans in a remarkable lifelike style. Each doll is created to scale (2" = 1 foot) from a master original sculpture by Raymond Lamb. Head and hands are hand-painted fine bisque porcelain. All clothing and accessories are authenticated by research historians and museums. This is American craftsmanship at its finest. The first limited edition presents Benjamin Franklin, George Washington, Abigail Adams and Thomas Jefferson. They want to live with you and your heirs.

For free color brochure call 800-446-7968, or write: Living Image Dolls™
United States Historical Society, Dept. S
First and Main Streets • Richmond, VA 23219

Smithsonian highlights

Spider monkeys, anteaters and a charging Indian rhino (p. 203) are among the subjects depicted in Caroline Thorington's 53 prints on display in the Museum of Natural History rotunda from October 23 to December 19. The artist created many of her works while accompanying her husband, Richard Thorington, a curator of mammals at MNH, on field trips to Panama, Venezuela and other exotic places.

Special October exhibits and events

National Air and Space Museum
Budd Davisson Aviation Photography (October 21-September 1983) Photographs capturing the drama of air shows.
The Star Machine (October 2; 9:00 A.M.) Monthly sky lecture.
Sputnik: 25 Years Later (October 4; 7:30 P.M.) Lecture.

National Museum of African Art
African Emblems of Status and Achievement (October 27-January 1983) Art objects as symbols of achievement.

Freer Gallery of Art
Chinese Art of the Warring States Period: Change and Continuity (October 1-February 15, 1983) See p. 205.

National Museum of Natural History
From the New World and Other Images (October 23-December 19) Prints by Washington artist Caroline Thorington.
Borobudur: The Cosmic Mountain (October 15; noon) Film.

Cooper-Hewitt Museum (New York)
Scandinavian Design Now (October 14-16) Symposium on industrial design.

Regional Events

In October, the Smithsonian National Associate Regional Events Program begins its eighth tour season, bringing week-long series of Smithsonian lectures, semi-

264 INDISPENSABLE HOUSEHOLD HELPERS

Send me your FREE 48-page Homewares catalog.

Name _____
Address _____
City _____
State _____ Zip _____

Dept. LA189A, 70 Vose Farm Road
Peterborough, New Hampshire 03458

Brookstone
HOMEWARES

"DENTIST" BANK
Authentic Cast Iron Replica, Mechanical

Made in U.S.A. from Original 1880 Molds

Fee (coin) is placed in dentist's pocket, then you press lever. Dentist pulls tooth, both he & patient go sprawling while coin falls into bank's base (10" long overall). Order #570, $58.50, plus $2 shipping cost. • FREE 8-page color catalog shows many other banks and cast iron toys. Phone: 716/396-2656 –credit card charges.

ELIZABETH EDGE STUDIOS
Dept. S-102 Canandaigua, N.Y. 14424

COLORADO SKI TOURING

Small, elegant, cozy. Come and see us and you'll want to buy our cookbook before you leave. Write or call for brochure.

- Log Cabins
- Private Hot Tubs
- Free Skiis
- Instruction

(303) 879-1780

Box 822E Clark, Colorado 80428

Cedar-äl. Pet Pillow repels ticks fleas & naturally

Eliminates pet odors.
Organic. Non-toxic. Safe around pets & children.
NOW! IMPROVED CEDAR SHAVINGS!
· More loft · Less settling
· No dust · Keeps its shape
Filled with Western Red Cedar shavings.

Simple. Effective. Just place a Cedar-äl Pet Pillow where your dog or cat sleeps. Nature does the rest. A safe alternative to chemical sprays and powders. Burlap outer cover unsnaps for easy washing.

Satisfaction guaranteed or your money back.

☐ *Small (18x23")* $14
☐ *Medium (25x33")* $17
☐ *Large (32x43")* $21

Prices incl. shipping & sales taxes.

Cedar-äl Products, Dept. SN, Rt. 1 Box 6, Clallam Bay, WA 98326

nars and workshops to Associates residing outside the Washington, D.C., area. Co-sponsored by local museums and cultural organizations in each community, the series highlights Smithsonian research activities and enables Associates throughout the country to participate more fully in the life of the national museum.

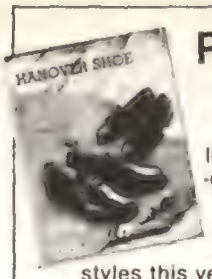
The 1982-83 series begins with visits to Oklahoma City, Norman and Tulsa, Oklahoma (October 23-November 1). Included in this program are lectures on Native American history, geology, botany and anthropology. Seminar and workshop topics include space-station model design, historic preservation, volcanology and art collecting. Associates in these cities should have received invitations by now.

In the coming year, the Regional Events Program will visit Las Vegas (January); Phoenix (February); San Diego (March); Scranton and Wilkes-Barre, Pennsylvania, and Milwaukee (April); and Grand Rapids, Kalamazoo and Lansing, Michigan (May). Inquiries should be directed to: Regional Events Program, A&I 1208, Smithsonian Institution, Washington, D.C. 20560.

Smithsonian Institution Traveling Exhibition Service

SITES circulates exhibitions to hundreds of cities outside Washington. To sponsor a show in your community, write: SITES, Smithsonian, Washington, D.C. 20560. Here are some October exhibits:

Rhino charges in MNH print exhibit, opening in the rotunda October 23.



PREMIUM SHOES LOW PRICES!

You can order the finest premium leather men's shoes at low, factory-direct prices from Hanover, a leading name in shoes since 1899. Known for quality, Hanover's expanded line includes hundreds of styles this year, both dress and casual, as well as shirts, ties, accessories, and women's shoes.

Free Catalog Send today for free 32-page full color catalog & special money-saving Introductory Offer.

MAIL TO: **The Hanover Shoe, Inc.**
Box 340, Dept. 9228, Hanover, PA 17331
☐ *Please send free catalog*

Name _____

Address _____

City/State _____ Zip _____

FOLK ART CLASSIC

Hand painting and detailing give this beautifully carved rocking horse the authentic look of his nineteenth century ancestors.

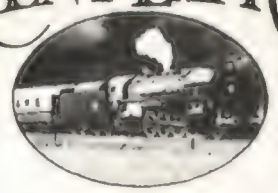
24" high
$295 postpaid
Check, MC/Visa

Make a decorating statement with this outstanding work of art. Or give him as a special gift to your favorite little rider — he's child tested.

Send for free full color brochure illustrating our entire line of American folk art.

Round Lake Studios Dept. S10
131 Round Lake Road, Ridgefield, CT 06877
Distinguished Reproductions

ORIENT EXPRESS



Relive the romance, mystery and elegance of the Orient Express on its original routing between Paris and Istanbul.

Board our beautifully restored 1920s luxury train for a memorable 12-day program which includes festivities and off-train excursions en route. A candlelit lunch in a champagne cellar. A Viennese ball. A cruise on the Bosporus Strait. Dinner parties in a sultan's palace and a marquis' chateau.

On our private vintage train, enjoy superb cuisine, complemented by fine wines and served with finesse. Revel in the personal service the skilled staff of 27 provides our 98 pampered passengers.

Society Expeditions

Dept. SM82100 723 Broadway East, Seattle, WA 98102

I would like to know more about Society Expeditions ORIENT EXPRESS
Please forward your complete itinerary.

Name _____

Street _____

City/State/Zip _____

I'm right here in America– and I need you for a friend.

Annie is typical of many American Indian children who may not stay in school without the help you can give.

She's bright as a button. But her father can't find permanent work and her mother must care for brothers and sisters who live with her on an Arizona reservation.

Her family and tribe are proud of Annie's progress in school and they want her to finish. And now, happily, she has a Futures sponsor – someone like yourself—who will help make it happen.

But there are many other Annies: school-age girls and boys on reservations who need your help.

Through Futures for Children you can sponsor one or more of them. Your contribution of $25 a month will buy new jeans, shoes, a warm coat for cold winters, personal items, school supplies, and much more. *And you'll enrich your own life in coming to understand a different culture—right here in the United States.*

So you don't have to look far to find a child who needs your help. You'll receive a picture of your Indian child, a personal history, and lots of information about life in Indian America. What a thrill to get that first letter from your Indian child! Write your check to Futures today. Please send it with the coupon below.

_____ I want to sponsor an American Indian child ☐ boy ☐ girl ☐ either S 1082

_____ Enclosed is a check for $_____
($25 monthly; $75 quarterly; $150 semi-annually; $300 annually).

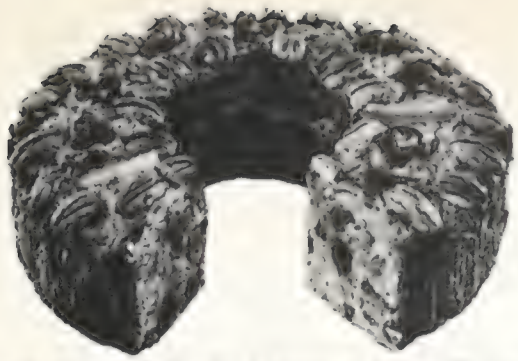
_____ Can't be a sponsor now, but I'd like to help your program. Enclosed is my tax-deductible donation of $_____

_____ Send me more information about sponsoring an American Indian child.

Let me help your community program for Indian parents. Here is my contribution of $ _____ and please send me more information.

Name _____
Address _____
City _____ State _____ Zip _____

Futures For Children *(All contributions are tax-deductible.)*
4401 Montgomery Blvd. N.E. #194 Albuquerque, NM 87109 Toll Free (800) 545-6843 In New Mexico (505) 881-6616



Order Your FREE Sample Slice Today

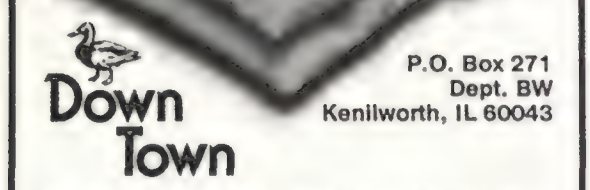
Discover Original DeLuxe, "that famous Corsicana, Texas Fruit Cake" — ordered by mail around the world since 1896. Crammed with luscious fruits and rich, native pecans, then custom-baked for your holidays, shipped fresh from our kitchens. Guaranteed best you've ever tasted! (Never sold in stores.) Send for FREE SAMPLE SLICE or order now. Cash or card-charge: MC, Visa, DC, AE. Include number, expiration, signature. Prices through Dec. 31, 1982: 2-lb., $9.15; 3-lb., $13.15; 5-lb., $21.45, postpaid. Collin Street Bakery (408 W. 7th Ave.), Box 0523, Corsicana, Texas 75110.

PHOTO COLLECTORS — OUR NEWSLETTER COMPLETELY INFORMS, ASSISTS, SAVES YOU $$$

Subscribed to by major museums and galleries. Coverage of auctions, symposiums, news, trends, comprehensive show listings, photo technology, books, portfolios, tips on storage/preservation, educational opportunities. Buy/sell classified. Ideal gift. Special subscription offer, only $35.00 for 12 issues (reg. price $65)

PHOTOGRAPHS: A COLLECTORS NEWSLETTER
450 Broome St., N.Y., NY 10013 (212) 966-4185

PRIME DOWN
Factory Direct at ½ the Price



Down Town

P.O. Box 271
Dept. BW
Kenilworth, IL 60043

PRIME DOWN COMFORTERS. The shell's fabric is a triblend of cotton, nylon, and polyester, channel stitched to prevent down shifting. Colors are: Tan, Chocolate Brown, or reversible Tan/Chocolate Brown. Individual storage bag with zipper included.

Twin (68"x86") contains 1.5 lbs. of down **$89**
Full (76"x86") contains 2.0 lbs. of down **$139**
Queen/King (104"x86") contains 3.0 lbs. of down **$159**

DOWN/FEATHER PILLOWS. Select between Soft (100% down), Medium (50% down/50% feather), or Firm (25% down/75% feather) fillings.

Standard (20"x26") $30
Queen (20"x30") $40
King (20"x36") $50

Postage included. Illinois residents add sales tax. Send check (or use Visa/Mastercard – include card #, exp. date, and signature) to above address or charge by phone (24 hour):

800-323-6556, Ext. R58
(In Illinois 800-942-6345)
Satisfaction Guaranteed

San Diego (October 9-December 4) *Renaissance of Islam*, Museum of Art.
Santa Fe (October 14-November 28) *John Sloan in Santa Fe*, Museum of Fine Arts.
Charleston, South Carolina (October 30-November 28) *We'll Never Turn Back*, Avery Institute of Afro-American History.
Pine Bluff, Arkansas (October 30-November 28) *America's Architectural Heritage*, Southeast Arkansas Arts and Science Center.
Los Angeles (October 23-November 21) *Transformed Houses*, UCLA School of Architecture and Urban Planning.
Colorado Springs (October 9-November 7) *Western Views and Eastern Visions*, Colorado Springs Fine Arts Center.
Miami Beach (October 2-October 31) *Lithographs of James McNeill Whistler*, Bass Museum of Art.

Smithsonian events

For price information and tickets to Resident Associate events, call 357-3030:
Jewel on the Bosporus (October 16) All-day seminar on Istanbul.
An Anthology of British Cities (October 30-31) Two-day seminar on architectural history of six British cities.
An Evening of Val Lewton Films (October 31) Two suspense classics.
Japanese Noh Theater (October 28) Lecture and demonstration.
Places for Worship (October 13, 20; November 10) Three-part lecture series.

Radio Smithsonian

Saltwater crops, the mighty Woolly Mammoth and signals from deep space are among the October listings for Radio Smithsonian. To find out which stations in your area carry these programs, write: Smithsonian Office of Telecommunications, MNH Room C222B, Washington, D.C. 20560.

Membership benefits

Members who begin their Smithsonian visit at the Associates Reception Desk in the Castle receive special printed materials and detailed information about their benefits, which include discounts in Smithsonian shops, dining in The Court, relaxing in the Lounge and a slide-lecture orientation to the 13 Smithsonian museums. The Desk is staffed 10 A.M. to 4 P.M. daily. Most Smithsonian museums are open 10 A.M. to 5:30 P.M. daily.

For a free previsit information packet, send postcard request to Associates Reception Center, Smithsonian Institution, Washington, D.C. 20560, or phone 202-357-2700; for hearing impaired, TDD 202-357-1729. Allow two weeks for receipt.

HE IS REMEMBERED FOR TWO THINGS THAT BEAR HIS NAME: A MINERAL AND AN INSTITUTION.

James Smithson's work in experimental chemistry and mineralogy brought him great regard in 18th-century scientific circles, so much so that a French geologist conferred the name "smithsonite" on the compound carbonate of zinc. However, Smithson's wish that "My name shall live in the memory of man" was realized chiefly through a contingency bequest in his will. That document provided that, upon the death of his nephew without heir, Smithson's estate would pass "to the United States of America to found at Washington, under the name of the Smithsonian institution, an establishment for the increase and diffusion of knowledge among men." Smithson died in 1829; his nephew, childless, in 1835. His bequest, shipped to this country from England in eleven boxes containing $508,318.46 worth of gold sovereigns, was accepted by Congress in 1846, and became the foundation of one of the world's leading educational and cultural institutions.

Private gifts, such as wills and bequests, as well as life-income gifts, have historically supplemented the appropriations of Congress in support of Smithsonian activities.

You can help the Smithsonian conduct scientific research, acquire valuable works of art, and provide educational exhibits through a Life-Income Gift. Some donors have found that they could actually increase their income through a gift of low-yield, highly appreciated securities, and, of course, there are specific tax benefits available from a variety of Life-Income Gifts.

For further information:
Mr. James Symington
Room 1465
Arts and Industries Building
Smithsonian Institution
Washington, D.C. 20560

Highlights continued

Chinese art at the Freer

Warring States period was filled with turmoil, but it produced some of China's exquisite pieces

The Warring States period in China (480-222 B.C.)was a 250-year span of tumultuous conflict. The ancient feudal order was crumbling as a number of principalities, led by newly wealthy upstarts with less-than-prestigious backgrounds, vied with each other for control. And yet in the midst of constant chaos, this new, powerful class found the time to outfit their daughters, their huge armies and eventually their own tombs with vibrant objects wrought in inlaid metal, jade and lacquer. "Chinese Art of the Warring States Period," an exhibition at the Freer Gallery of Art that runs through mid-February, offers 151 of these lavish works.

"To have large pits for burial is to provide work for poor people; to have magnificent tombs is to provide work for artisans," advised the *Kuan Tzu*, a treatise that the new elite took to heart. Elaborate bronze vessels were created for their pleasure, such as the *pien-hu*, or canteen (bottom left), with its vibrant geometric pattern in silver inlay.

Ironically, articles for war are among the most delightful of all. The pair of inlaid bronze fittings whose animal heads terminate in lithe serpents (bottom center) may have been part of a crossbow. And the fierce dragon head (upper left)—its teeth and eyeballs overlaid with silver and the pupils of its eyes made of glass—probably ornamented the end of a chariot pole. While most ages and cultures have considered war an art, this period of history gave "the art of war" new meaning.
Constance Bond

Dragon-head ornament is said to have been dug up in a horse pit, near a tomb.

Original arrangement of these jade pieces and gold-wire chain is uncertain.

Fanciful tapirlike beast seems to have had no practical or ritual function.

Pien-hu, or canteen, boasts inlaid silver decoration in geometric style.

On a pair of bronze fittings, lower jaws of animals transform into snakes.

Three pieces of carved wood were joined for this nine-inch-tall lacquered cup.

Join with other Smithsonian Associates

Travel and Study, at Home, Abroad . . . and

As a Smithsonian Associate, you can enjoy the benefit of culturally oriented experiences under the guidance of museum curators or visiting scholars. Your lively curiosity and broad interests have resulted in a comprehensive study program to meet many tastes and budgets.

Smithsonian Holiday Programs

Christmas at the Smithsonian December 3-5: Welcome the holidays with a gala tree-trimming party, concert and special behind-the-scenes tours.

Christmas at Canterbury December 22-January 2: An old-fashioned Dickens yuletide with services at Becket's cathedral, wassail, the yule log and traditional Christmas dinner. Celebrate the New Year in London.

Baroque Winter January 2-16: Opera, lavishly decorated churches, museums, castles in Vienna, Salzburg and Munich, with a special Viennese ball.

Domestic Study Tours

Sapelo Island November 7-13: Camp on unspoiled beaches while studying the ecology and history of this Georgia barrier island.

Everglades November 27-December 4: Hike, canoe and cruise through remote areas to see firsthand the variety of birds, wildflowers and alligators.

Hawaii January 30-February 12: Camp on secluded beaches and enjoy the solitude and beauty of these islands.

Baja Whale Watch February 12-20: A rare opportunity to see marine mammals at close range in their isolated habitats.

Yellowstone in Snow February 18-27: Ski across magical landscapes to observe coyotes, otter, eagles and elk.

Okefenokee Swamp March 26-April 2: Canoe through the heart of this beautiful primeval refuge with its moss-draped cypress trees and array of springtime flowers.

New Orleans April 10-17: Learn about the history, architecture and cuisine of New Orleans plus the rich culture of Acadia.

Big Bend April 13-22: Hike the spectacular canyon trails in this southwest Texas wilderness park.

Washington, D.C.: Power and Style April 26-May 1: Spend a day in Congress; visit charming neighborhoods, historic sites and museums with local guides.

Washington "Anytime" Weekend: An economical and convenient way to visit your choice of Smithsonian museums for two or more nights at Loew's L'Enfant Plaza or Hyatt Regency. Package includes hotel, two meals, Tourmobile ticket, and exclusive tour of Smithsonian castle. Applications and payment must be received at least ten days prior to arrival.

Foreign Study Tours

These tours range in size from small group experiences to charter adventures and vary in price from low cost to deluxe, depending on the type of travel, destination visited and length of trip:

People's Republic of China 1983: Follow the Silk Route, climb China's sacred peaks, cruise the Grand Canal, explore the back roads, study decorative arts and antiques, or journey from Paris to Beijing by train. These exclusive tours are led by a Sinologist and include intensive pre-tour briefing.

Seminar in Salzburg October 23-November 7: An opulent palace surrounded by mountains and lakes provides perfect setting for a study of the Baroque age or the history of opera.

Kyoto Seminar November 5-21: Live Japanese style with futon and hot baths. Field trips complement lectures on art, history, religion and language.

The Ancient World of Peru November 6-21: Visit Lima, Cuzco, Indian markets and amazing Machu Picchu.

New Zealand November 17-December 3: Relish glorious scenery on this in-depth tour; talks on natural history, the Maoris, parliament; and a home visit.

A Hike in New Zealand November 17-December 3: For the outdoors enthusiast: wildflowers, ferns, crystalline lakes and snow-capped peaks on the Milford Track, the "finest walk in the world."

The Atlantic Crossing November 26-December 11: A sailing adventure from the Canary Islands to Martinique on the square-rigged, four-masted bark *Sea Cloud.*

Mayan Mexico: The Yucatán Peninsula January 20-February 1 or February 10-22: Tour extraordinary Mayan ruins in the company of an archaeologist.

India Wildlife Safari February 5- March 2: Travel by elephant and jeep to observe rare species of birds and animals. Includes Kathmandu and Tiger Tops, Bombay, Delhi and the Taj Mahal.

Caribbean Study Voyage February 11-20: The luxurious 317-foot, four-masted *Sea Cloud* sails through the Lesser Antilles for a study of tall ships and the area's natural and cultural history.

Thailand and Burma February 18-March 11: Explore colorful cities, remote villages, and archaeological sites in Asia's most exotic countries.

Red Sea Passage February 23-March 7: Sailing from Suez on the *Argonaut*, visit Karnak, Luxor, Valley of the Kings, Abu Simbel in Egypt and Petra in Jordan. Tour the mosques and bazaars of Cairo, the Sphinx and pyramids of Giza.

Zapotec and Mayan Mexico February 24-March 8: Study native cultures—past and present—in Oaxaca, San Cristóbal de las Casas and the Yucatán.

Indonesia March 26-April 15: Cruise beyond the ordinary to the islands of the Java Sea, including Bali and Komodo. Study natural history and traditional crafts; observe local customs and rituals. Visit Singapore and Hong Kong.

Write National Associates, A&I 1278 Smithsonian Institution, Washington, D.C. 20560 or call (202) 357-2477 for specific tour brochures

Washington

Selected Studies Seminars

Enjoy the treasures of the Smithsonian in popular programs and special behind-the-scenes tours. Choose from:

Tibet: Lost Horizons October 17-22: The culture, history and art of this rich civilization, along with behind-the-scenes tours of the Freer Gallery and the best private Tibetan art collection in the United States.

China: A Cultural History October 24-29: From prehistory to the enigmas of today, with emphasis on intellectual and artistic traditions and the great philosophies and religions. Includes recent films and behind-the-scenes tours of the outstanding collection of the Freer Gallery of Art.

Princes and Patriots: Flemish and Dutch Painting in the 17th Century November 14-19: Lectures and tours of the masterpieces of Rembrandt, Hals, Vermeer, Rubens, Van Dyck and other artists in the National Gallery of Art with art historian Bill Kloss.

Connoisseurship of Gems November 7-11: Nationally known gem expert and author, Benjamin Zucker, gives a comprehensive look at the sumptuous world of precious gems in lavishly illustrated lectures. Participants also become familiar with the famous gems and jewelry in the magnificent collection at the Smithsonian.

Genealogical Research March 13-18: Taught by Milton Rubincam, Marilyn Duncan and other leading authorities, participants learn how to conduct research in major genealogical repositories such as the National Archives, Library of Congress and DAR Library.

Contemporary Book Publishing March 20-25: Experts give an inside look at editing, design, production and sales today of scholarly and popular "trade" books. Participants tour an established commercial printing firm to see the latest technologies and techniques.

French Impressionist Painting March 27-April 1: Lectures and tours with Bill Kloss of the beloved masterpieces by Monet, Degas, Renoir and others in the famous collections of Washington's many museums.

or (202) 357-2475 for seminar brochures.

Sole U.S.A. Distributor Foreign Vintages, Inc. New York, N.Y. 80 Proof.

Rémy®

REMY MARTIN

Maison fondée en 1724

Rémy Martin

V.S.O.P.

COGNAC

FRANCE

PRODUCE OF FRANCE

80 PROOF 750 ml

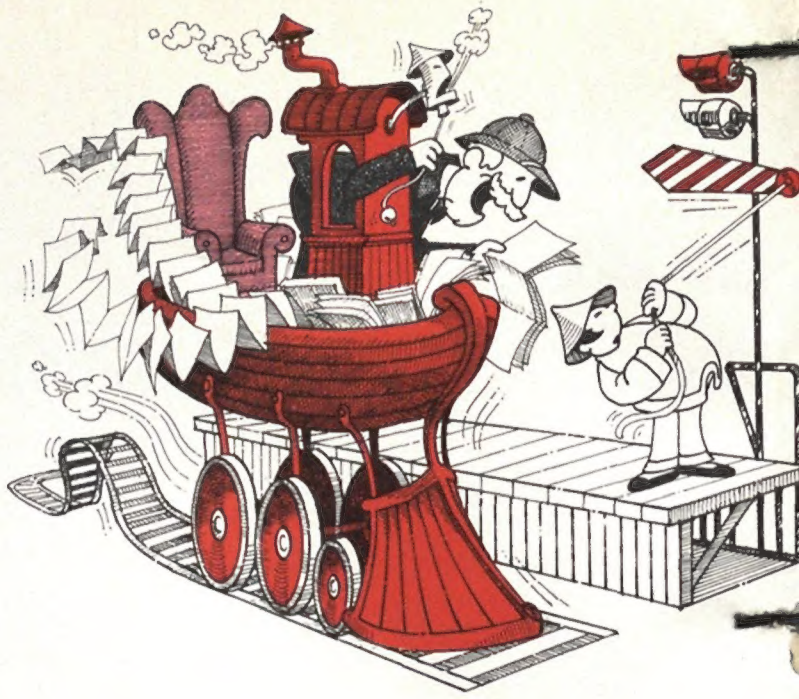
FINE CHAMPAGNE COGNAC

THE FIRST NAME IN COGNAC SINCE 1724

EXCLUSIVELY FINE CHAMPAGNE COGNAC FROM THE TWO BEST DISTRICTS OF THE COGNAC REGION

By Israel Shenker

All Eksikutifs aboard (if you dare) for Krf, Trst and Walla Walla!



Whenever I feel loose of limb, armchair travel is what suits me down to the ground. Comfortably ensconced, I drift into the delights of two volumes that sell in thousands and never appear on best-seller lists. Thomas Cook's flame-red *Continental Timetable*, now in its second century and revised monthly, covers railways, buses and ships of Europe; the blue *Overseas Timetable*, updated every two months, deals with the rest of the planet.

As I shunt through the closely printed schedules, the blood stirs within me and my heart begins to race: leave Peddanayakkanpalaiyam at 0924, change at Vriddhachalam, arrive Tiruchchirappalli at 1620; depart Albuquerque 0800, arrive Truth or Consequences 1130.

At Peterborough, England, where local pulses run on a 24-hour clock, John H. Price edits *C.T.*, Peter I. Tremlett, *O.T.* With help from train buffs, they track through forbidding forests of figures and obdurate clumps of officialdom. When Tremlett sought information from North Korea, back came a lengthy biography of Maximum Stationmaster Kim il Sung—three identical copies in five years. The Venezuelan government informed Peterborough that there were no trains in the country, but Tremlett signals the run from Barquisimeto to Puerto Cabello.

Mozambique authorities reply graciously to queries by surface mail that takes five months to arrive. China responds only to questions posed in Chinese. Bolivia indicated widely differing mileages for trains back and forth on a single line. When there were no answers from Vietnam, Peterborough advised Her Majesty's plenipotentiary in Hanoi, who dispatched a deputy to go to the station and note down the times of trains to the city of Ho Chi Minh. In Burma, an Australian schoolteacher—who has earned my undying gratitude as well as envy—boarded the Rangoon-to-Mandalay local, got off at every stop and copied the schedules from station blackboards. Mali was terra incognita until a member of the Peace Corps supplied details of modern caravan routes. Zimbabwe confesses that listed starting times are only to "fix the time before which a train will not start."

The rain in Bhutan falls mainly on the plain, up to 250 inches a year, comments *O.T.* "Hot, humid and unhealthy in the plains. There are no rail services, poor roads, and virtually no public transport in Bhutan." Whirlwinds sweep through Niger, and in the Sudan, "The dusty conditions make the supplement payable for air-conditioned accommodation well worthwhile." From India, where I stammer blissfully between Peddanayakkanpalaiyam and Tiruchchirappalli, comes word that service is suspended on the Matheran Hill Railway during the monsoon season, and that my second-class ticket does not entitle me to a place on the roof of a first-class carriage.

Price and Tremlett punctiliously post all class distinctions. While some railways have but a single class, the usual complement is two or three classes. Malaysia's categories are De Luxe, Eksikutif and Ekonomi. Bangladesh is top of the charts with six classes. Thomas Cook's men warn that Costa Rica bars gypsies and "persons of unkempt appearance." In perfect kemp I speed from Costa Rica's Pandora Oeste to Fortuna in 15 minutes, find Jacob's Well in Israel and Smiggins Holes in Australia. The Dougou Rapid hurtles me from Upper Volta to the Ivory Coast, via Ouagadougou, Koudougou, Ouangolodougou and Ferkessédougou, while the timetables make short work of Ål, Au, Bo (Sierra Leone), Bø (Norway), Ed, Eu, Po, Ur and Ye. O ye of paltry tongue, Table 1500 in *C.T.* decodes Krf as Serbo-Croatian for Corfu, Trst for Trieste.

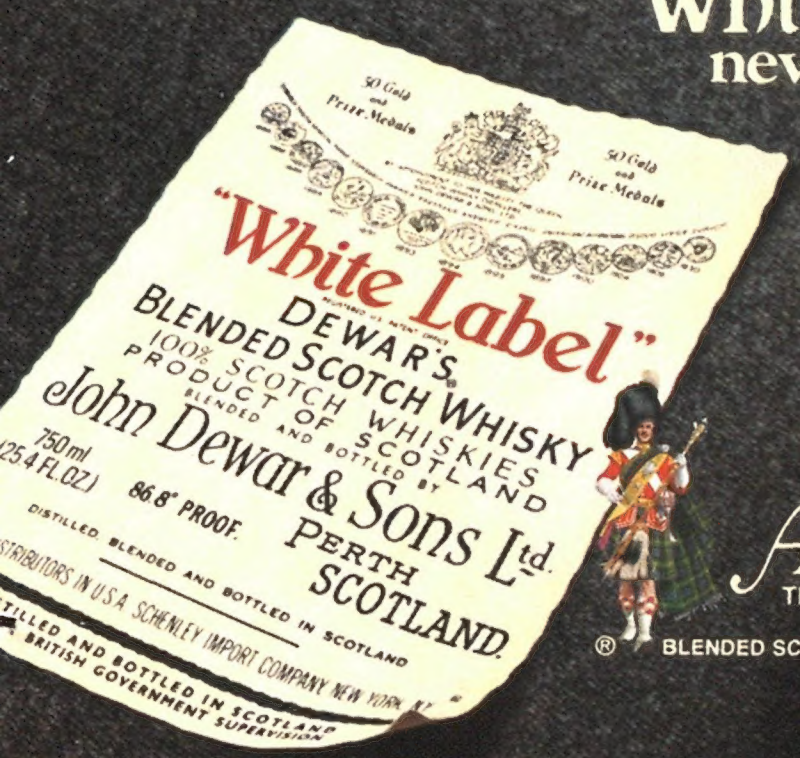
Alien cntmpt for my native vowels gives way to expansiveness for two-timing, round-tripping Baden-Baden, Que Que, Wagga Wagga, Walla Walla and Xique Xique. Haiti's tap-taps are not choo-choos or even puff-puffs, but "small trucks with wooden 'knifeboard' seats"—we sit back to back on benches running lengthwise.

In my timetables, Europe stands firm for culture, featuring trains named Mozart (Paris-Vienna), Rembrandt (Amsterdam-Stuttgart) and Wiener Walzer (Basel-Budapest). America stops me in its tracks: between California's Fort Bragg and Willits it is 40 grueling miles and two interminable hours as the Skunk plies (early on, the train was gasoline powered and wood heated, to the olfactory distress of passengers); the Super Skunk extends the pleasure by a full 60 minutes when it rolls with a cargo of sightseers.

On a trip to Czechoslovakia some years back, Price astonished authorities by reproducing the country's railway map from memory, and he has now abandoned the struggle to forget his lines. Asked if he fancied the trips catalogued in *his* timetable, Tremlett was of two minds. "Yes," he replied, "with reservations."

In Scotland's Strathdearn vale, breeding fast hunters is more than a matter of pride. It's a family tradition. Like father; like son, like grandson. The good things in life stay that way.

DEWAR'S®
"White Label"®
never varies.



Authentic®
The Dewar Highlander

® BLENDED SCOTCH WHISKY · 86.8 PROOF · © 1982 SCHENLEY IMPORTS CO., N.Y., N.Y.

The most beautiful beaches in Hawaii aren't necessarily the most famous ones.

United flight attendant
Christine Nishihira

Christine Nishihira

We'll relax you in the secluded splendor of Kauai's endless shoreline.

We'll enchant you with the uninhibited friendliness of Maui's celebrated coast.

We'll dazzle you with the eerie mysteries of the black sands of the Big Island.

And we'll captivate you with a unique kind of spirit you'll only find here in the islands of United's "Other Hawaii."

You'll experience it all, starting right on board our exclusive Royal Hawaiian flights. Come see Hawaii through the eyes of the people who know her best.

The people of United.

Fly the friendly skies of United.

Call United or your Travel Agent.

Lumahai Beach, Kauai